LINKSYS®
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USER GUIDE

BUSINESS SERIES

2.4 GHz Wireless-G PTZ Internet Camera with Audio

Model: WVC200, WVC210

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Getting Started

The focus of this guide is on the WVC210 PTZ Internet Camera, with references to the WVC200 camera where appropriate. Advanced features and procedures are covered in the *Linksys Video Surveillance Application User Guide*.

How to Use this Guide

This User Guide has been designed to make understanding networking with the camera easier than ever. Look for the following items when reading this guide:

WARNING: This graphic means there is a Warning and is something that could damage your self, property, or the camera.

NOTE: This checkmark means there is a Note of interest and is something you should pay special attention to while using the camera.

CAUTION: This exclamation point means that caution should be used when performing a step or a serious error may occur.

Document Style Conventions

The following style conventions are used in this document.

- **Menus, Tabs, and Buttons:** Bold type is used to indicate the name of a button, menu, or tab in an application.

  Example: Click **Submit All Changes** to save your entries.

- **Screens, Page Areas, and Fields:** Italic type is used to indicate the name of screens, page areas, and fields.

  Example: Scroll down to the *PBX Parameters* area of the screen.

- **Data Input:** The **`Courier`** font is used to indicate characters that you should type into a field exactly as printed in this guide.

  Example: In the *Mailbox Subscribe Expires* field, type **`30`**.

  In this example, you would type the number 30 in the field.

- **Parameters:** Angle brackets and italic type indicate parameters that you must replace with the appropriate data.

  Example: Type **`800@`**<*IP address of device*>**`:5090`**

In this example, you would type the characters 800@, followed by the IP address of your device, followed by a colon and the number 5090.

Finding Information in Your PDF Documents

The PDF Find/Search tool lets you find information quickly and easily online. You can:

- Search an individual PDF
- Search multiple PDFs at once (for example, all PDFs in a specific folder or disk drive)
- Perform advanced searches

Finding Text in a PDF

By default, the Find toolbar is open. If it has been closed, choose **Edit > Find**.

Use Find to search for text in an open PDF:

1. Enter your search terms in the *Find* box on the toolbar.
2. Optionally click the arrow next to the Find text box to refine your search (such as Whole words only).
3. Press **Enter**. Acrobat jumps to the first instance of the search term. Pressing **Enter** again continues to more instances of the term.

Finding Text in Multiple PDFs

The *Search* window lets you search for terms in multiple PDFs. The PDFs do not need to be open. Either:

- Choose **Edit** > **Search**

  or

- Click the arrow next to the *Find* box and choose Open Full Acrobat Search. The *Search* window appears.

In the *Search* window:

1. Enter the text you want to find.
2. Choose **All PDF Documents in**
3. From the drop-down box, choose **Browse for Location**.
4. Choose the location you want to search, either on your computer or on a network, then click **OK**.
5. If you want to specify additional search criteria, click **Advanced Search Options**, and choose the options you want.

6. Click **Search.**

For more information about the Find and Search functions, see the Adobe Acrobat online help.

Planning Your Wireless Network

A wireless local area network (WLAN) is exactly like a regular local area network (LAN), except that each computer in the WLAN uses a wireless device to connect to the network. Computers and other devices, such as peripherals, in a WLAN share the same frequency channel and SSID, which is an identification name for wireless devices.

Ad-Hoc and Infrastructure Modes

Unlike wired networks, wireless networks have two different modes in which they may be set up: infrastructure and ad-hoc. An infrastructure configuration is a WLAN and wired LAN communicating to each other through an access point. An ad-hoc configuration is computers with wireless capabilities communicating directly with each other. Choosing between these two modes depends on whether or not the wireless network needs to share data or peripherals with a wired network or not.

If the computers on the wireless network need to be accessed by a wired network or need to share a peripheral, such as a printer, with the wired network computers, the wireless network should be set up in infrastructure mode. The basis of infrastructure mode centers around an access point, which serves as the main point of communications in a wireless network. (A wireless router can also be used because a wireless router incorporates the capabilities of an access point.) Access points transmit data to PCs equipped with wireless network cards, which can roam within a certain radial range of the access point. Multiple access points can be arranged to work in succession to extend the roaming range, and can be set up to communicate with your Ethernet (wired) hardware as well.

If the wireless network is relatively small and needs to share resources only with the other computers on the wireless network, then the ad-hoc mode can be used. Ad-hoc mode allows computers equipped with wireless transmitters and receivers to communicate directly with each other, eliminating the need for an access point. The drawback of this mode is that wireless-equipped computers are not able to communicate with computers on a wired network. And, of course, communication between the wireless-equipped computers is limited by the distance and interference directly between them.

Network Layout

The PTZ Internet Camera is compatible with all 802.11g routers, such as model number WRVS4400N, as well as access points, including model number WAP4400N. The camera can also communicate with network adapters, such as the Wireless-G Notebook Adapter (model number WPC4400N) for your laptop computers, Wireless-G PCI Adapter (model numbers WMP200) for your desktop PCs, and Wireless-G USB Adapter (model number WUSB200) for your computers when you want to enjoy USB connectivity.

With these, and many other Linksys products, your networking options are limitless. Go to the Linksys website at *www.linksys.com/international* for more information about products that work with the PTZ Internet Camera.

Wireless Security

Linksys wants to make wireless networking as safe and easy for you as possible. The current generation of Linksys products provide several network security features, but they require specific action on your part for implementation. So, keep the following in mind whenever you are setting up or using your wireless network.

Security Precautions

The following is a complete list of security precautions to take (at least steps 1 through 5 should be followed):

1. Change the default SSID.
2. Disable SSID Broadcast.
3. Change the default password for the Administrator account.
4. Change the SSID periodically.
5. Use the highest encryption algorithm possible. Use WPA if it is available. Please note that this may reduce your network performance.
6. Change the WEP encryption keys periodically.

NOTE: Some of these security features are available only through the network router or access point. Refer to the router or access point's documentation for more information.

Security Threats Facing Wireless Networks

Wireless networks are easy to find. Hackers know that in order to join a wireless network, wireless networking products first listen for "beacon messages". These messages can be easily decrypted and contain much of the network's information, such as the network's SSID (Service Set Identifier). Here are the steps you can take:

Change the administrator's password regularly. With every wireless networking device you use, keep in mind that network settings (SSID, WEP keys, etc.) are stored in its firmware. Your network administrator is the only person who can change network settings. If a hacker gets a hold of the administrator's password, he, too, can change those settings. So, make it harder for a hacker to get that information. Change the administrator's password regularly.

SSID. There are several things to keep in mind about the SSID:

- Disable Broadcast
- Make it unique
- Change it often

Most wireless networking devices will give you the option of broadcasting the SSID. While this option may be more convenient, it allows anyone to log into your wireless network. This includes hackers. So, don't broadcast the SSID.

Wireless networking products come with a default SSID set by the factory. (The Linksys default SSID is "linksys".) Hackers know these defaults and can check these against your network. Change your SSID to something unique and not something related to your company or the networking products you use.

Change your SSID regularly so that any hackers who have gained access to your wireless network will have to start from the beginning in trying to break in.

MAC Addresses. Enable MAC Address filtering. MAC Address filtering will allow you to provide access to only those wireless nodes with certain MAC Addresses. This makes it harder for a hacker to access your network with a random MAC Address.

WEP Encryption. Wired Equivalent Privacy (WEP) is often looked upon as a cure-all for wireless security concerns. This is overstating WEP's ability. Again, this can only provide enough security to make a hacker's job more difficult.

There are several ways that WEP can be maximized:

- Use the highest level of encryption possible
- Use "Shared Key" authentication
- Change your WEP key regularly

WPA/WPA2 Personal. Wi-Fi Protected Access (WPA) This method offers two encryption methods, TKIP and AES, with dynamic encryption keys.

A network encrypted with WPA/WPA2 is more secure than a network encrypted with WEP, because WPA/WPA2 uses dynamic key encryption. To protect the information as it passes over the airwaves, you should enable the highest level.

Implementing encryption may have a negative impact on your network's performance, but if you are transmitting sensitive data over your network, encryption should be used.

These security recommendations should help keep your mind at ease while you are enjoying the most flexible and convenient technology Linksys has to offer.

CAUTION: Always remember that each device in your wireless network MUST use the same encryption method and encryption key or your wireless network will not function properly.

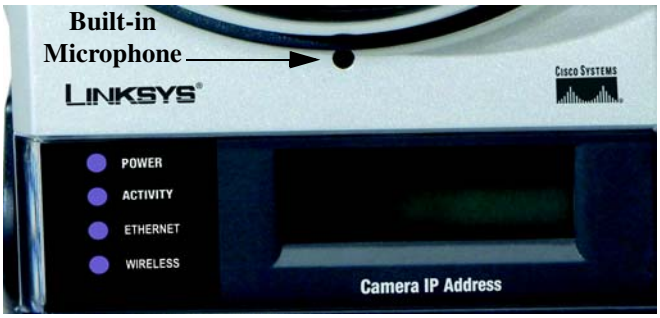
Getting to Know the PTZ Internet Camera

Congratulations on purchasing your camera from Linksys! Linksys has the only two cameras that are Wi-Fi certified in the United States, one of which is the WVC210.

Camera LCD Screen and Built-in Microphone

The camera has a LCD screen that indicates the camera's current IP address and whether it is a fixed or dynamic address. If the camera uses a fixed IP address, then the screen will display the word "FIXED." If the camera uses a dynamic IP address, then the screen will display the word "DHCP."

The built-in microphone is located approximately one inch below the LCD screen, in the middle of the camera's front panel. It has a range of approximately 9 feet (3 meters), depending on environmental conditions.



Camera LEDs

The camera has four LEDs to let you know how the camera is functioning.

LED	Description
POWER	Amber. The POWER LED lights up when the camera is powered on. It flashes for about 10-15 seconds while the camera is initializing.
ACTIVITY	Green. The ACTIVITY LED flashes when there is activity.
ETHERNET	Green. The ETHERNET LED lights up when there is a connection to a wired network. It flashes when data is transmitted to or received from the wired network.
WIRELESS	Green. The WIRELESS LED lights up when there is a connection to a wireless network. It flashes when data is transmitted to or received from the wireless network.

WVC210 Bottom

WVC200 Back

NOTE: Resetting the camera will erase all of your settings, such as encryption information, and replace them with the factory defaults. Do not reset the camera if you want to retain these settings.

Camera Ports and Button

The camera features three ports and a Reset button on the bottom panel.

Port/Button	Description
POWER	This port is where you will connect the 5V power adapter.
MIC IN	This port is where you will connect the 3.5 mm input jack of your external microphone (optional).
LAN	This port is where you will connect the Ethernet network cable.
RESET	This button is what you will press if you need to reset the camera. Insert a paper clip into the opening next to the Ethernet port. Then press the button and hold it in for five seconds. Be aware that this will erase all of your settings and return the camera to factory defaults

Port/Button	Description
SPKR OUT	This port is where you will connect the 3.5 mm input jack of your external speaker (optional). The speaker needs to be PC, or a powered speaker.

Connecting the PTZ Internet Camera

Overview

Before you set up the camera, connect it to a wired or wireless network. Refer to the following sources for additional information:

- WVC200/210 Quick Install Guide
- Linksys Video Surveillance Application User Guide

If you need to move the camera from a wired network to a wireless network, or vice versa, go to this section, "Moving the Camera to a Different Network."

Camera Installation Guidelines

Consider the following guidelines before installing and mounting your cameras. While the detection window and the degree of sensitivity can be optimized later, it is best to optimize your camera location first.

- Choose a location that provides adequate coverage of the area to be monitored.
- If using the microphone in the camera, note that the cameras are designed to pick up audio from a distance (unlike a web camera that you would place near you.)
- If using an external microphone or speaker, place the microphone far enough away from the speaker to avoid feedback. The volume of the speaker and the background noise of the environment will determine the exact distance, possibly up to one yard (one meter) away.
- Cameras mounted outdoors should be installed in an IP66-certified enclosure to protect the camera from the elements, while maintaining acceptable operating temperatures. If an enclosure is used, an external microphone is required for audio.
- If using motion detection, consider potential sources of false positives, such as trees and shrubs, drastic light changes, wandering animals, and traffic.

Connection to a Wired Network for Setup

1. Attach the antenna.
2. Connect the Ethernet network cable to your network switch or router.

3. Connect the other end of the cable to the Ethernet port on the camera.

4. Connect the power adapter to the Power port on the camera.

5. Plug the power adapter into an electrical outlet.

6. The camera's Ready LED flashes while the camera is initializing. The camera is ready for use when the Ready and Ethernet LEDs are solidly lit.

CAUTION: You MUST connect the camera to a PC, router, or switch using the Ethernet network cable BEFORE powering on the camera. Otherwise, the camera will not function.

Connection to a Wireless Ad-Hoc Network for Setup

1. Make sure your computer has the following wireless settings:
    - SSID - linksys
    - Network Mode - Ad-Hoc
    - Channel - 6
    - WEP - Disabled
2. Attach the antenna.
3. Connect the power adapter to the Power port on the camera.
4. Plug the power adapter into an electrical outlet. The camera's Ready LED flashes while the camera is initializing. The camera is ready for use when the Ready and Wireless LEDs are solidly lit.

Moving the Camera to a Different Network

When you move the camera from a wired network to a wireless network, or vice versa, you must power off the camera before connecting to the new network. Proceed to the appropriate instructions.

To move the camera from a wired network to a wireless network, follow these instructions:

1. Unplug the power adapter from the camera.
2. Unplug the Ethernet network cable from the camera.
3. Re-connect the power adapter to the Power port on the camera. The camera's Ready LED flashes while the camera is initializing. The camera is ready for use when the Ready and Wireless LEDs are solidly lit.

To move the camera from a wireless network to a wired network, follow these instructions:

1. Unplug the power adapter from the camera.
2. Connect the Ethernet network cable to your PC, router, or switch.
3. Connect the other end of the cable to the Ethernet port on the camera.
4. Re-connect the power adapter to the Power port on the camera. The camera's Ready LED flashes while the camera is initializing. The camera is ready for use when the Ready and LAN LEDs are solidly lit.

Placement Options

There are two ways to place the camera. The first way is to place the camera horizontally on a surface using the included stand. The second way is to mount the camera on a wall using an optional wall mount stand. The wall mount is not supplied in the camera kit.

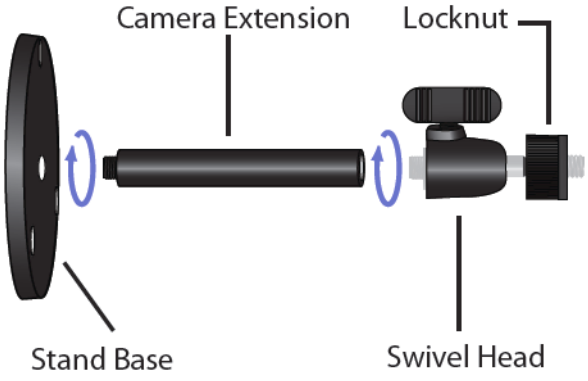
Stand Option

1. The camera includes a camera Desktop Stand. Insert the bottom end of the camera into the Stand.

2. Place the camera, and adjust its aim accordingly.

Wall Mount Option

There is a standard stand (not included) that can be used to attach to the back of the camera (1/4"x20 thread) to allow the camera to be mounted on a wall or ceiling.



1. Determine where you want to mount the camera. Attach the wall mount stand to the wall.
2. Attach the camera to the wall mount.
3. Adjust the camera's aim accordingly.

Audio Option

If you want to use your own microphone instead of the camera's built-in microphone, then follow these instructions:

1. Connect the 3.5 mm input jack of your microphone to the camera's MIC IN port on its bottom panel. The built-in microphone will automatically be disabled.
2. Place the external microphone in an appropriate location.

If you want to use an optional external speaker with the camera, then follow these instructions:

1. Connect the 3.5mm jack of your speaker to the camera's SPKR OUT port on its bottom panel.
2. Place the external speaker in an appropriate location.

Upgrading Firmware

The camera ships with the firmware release of 1.0.0. The camera's firmware is upgraded through the Web-based Utility's **Maintenance** tab. Follow these instructions:

1. Download the firmware from Linksys's website at www.linksys.com.
2. Extract the file.
3. Access the camera's Web-based Utility, and click the **Maintenance** tab.

4. On the *Maintenance* screen, click the **Firmware Upgrade** button.
5. Click the **Browse** button to find the extracted file, and then double-click the filename.
6. Click the **Start Upgrade** button, and follow the on-screen instructions. Click the **Cancel** button to cancel the firmware upgrade. For more information, click the **Help** button.

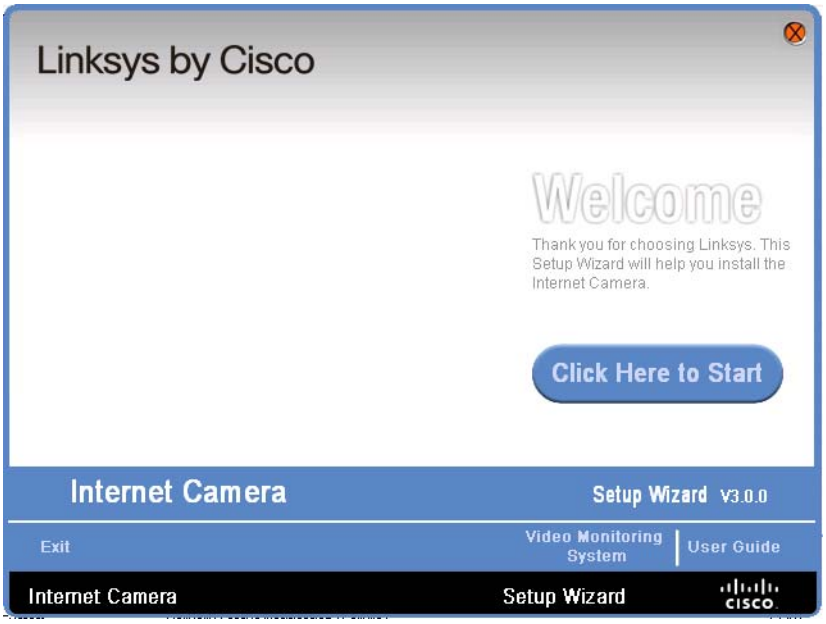
NOTE: Linksys recommends that you upgrade the camera's firmware within your network; in other words, use a computer within the camera's local network. If you attempt to upgrade the camera's firmware from a remote location—using a computer outside of the camera's local network—the upgrade may fail.

Installing Software

Your Linksys Internet Camera comes with configuration software that you install on your computer. Follow these steps to install the software.

1. Insert the Setup CD into your CD-ROM drive. If the CD doesn't run automatically, go to **My Computer** and click on your CD-ROM drive.

2. The Welcome screen will appear. Click the **Click Here to Start** button.



3. The license agreement screen will appear, click **Next** if you agree and wish to proceed.

LINKSYS
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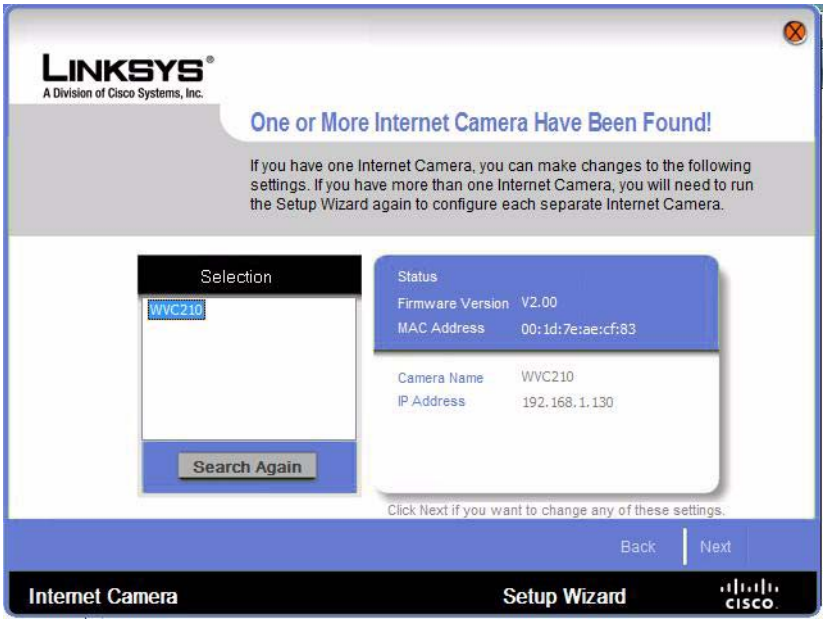
Software License Agreement
Please review the license agreement below.
Press the PAGE DOWN key or use the Scroll Bar to see the rest of the agreement.
Software License Agreement
Software in Linksys Products:
This product from Cisco-Linksys LLC or from its affiliate Cisco Systems-Linksys (Asia) Pte Ltd. ("Linksys") contains software (including firmware) originating from Linksys and its suppliers and may also contain software from the open source community. Any software originating from Linksys and its suppliers is licensed under the Linksys Software License Agreement contained at Schedule 1 below. You may also be prompted to review and
If you accept the terms of this Agreement, click Next to continue. If not, choose Cancel and the Setup Wizard will close. You must click Next to Continue the installation process.
Back
Next
Internet Camera
Setup Wizard
cisco

4. The Wizard will now search for your camera.

5. Once found, highlight the camera and click **Next**. If the camera you want is not displayed in the Selection box, click **Search Again**.


LINKSYS
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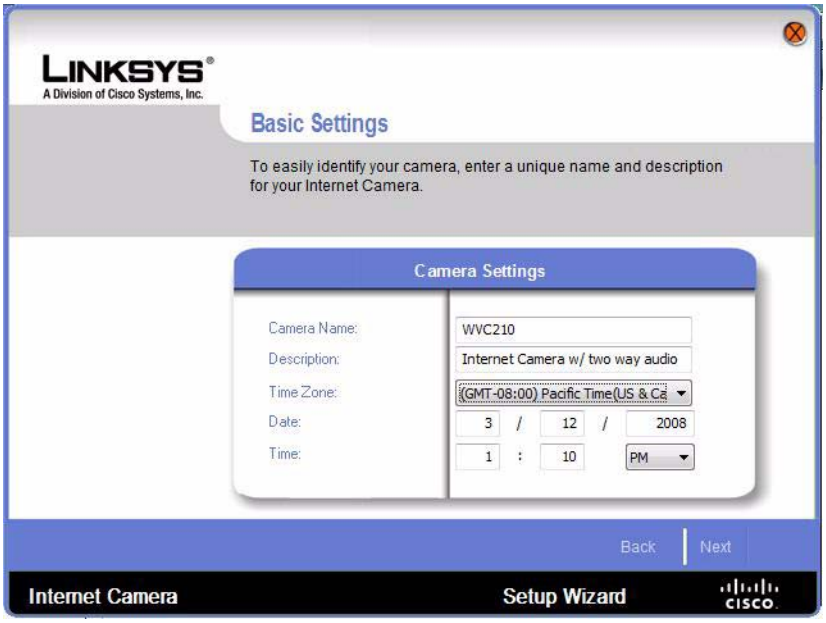
One or More Internet Camera Have Been Found!
If you have one Internet Camera, you can make changes to the following settings. If you have more than one Internet Camera, you will need to run the Setup Wizard again to configure each separate Internet Camera.
Selection
WVC210
Search Again
Status
Firmware Version V2.00
MAC Address 00:1d:7e:ae:cf:83
Camera Name WVC210
IP Address 192.168.1.130
Click Next if you want to change any of these settings.
Back
Next
Internet Camera
Setup Wizard
cisco

6. The default user name and password is admin. Type admin in lowercase letters, in the *Administrator Name* and *Administrator Password* fields, then click **OK**.

Administrator Name:
admin
Administrator Password:
The default administrator name and password is:admin. You will use this password later to access the Web-Based Utility. For enhanced security, change the administrator name and password through the Web-Based Utility's Password page.
OK
Cancel

For security purposes, it is recommended that you change the default name and password using the camera's web-based utility at a later time.

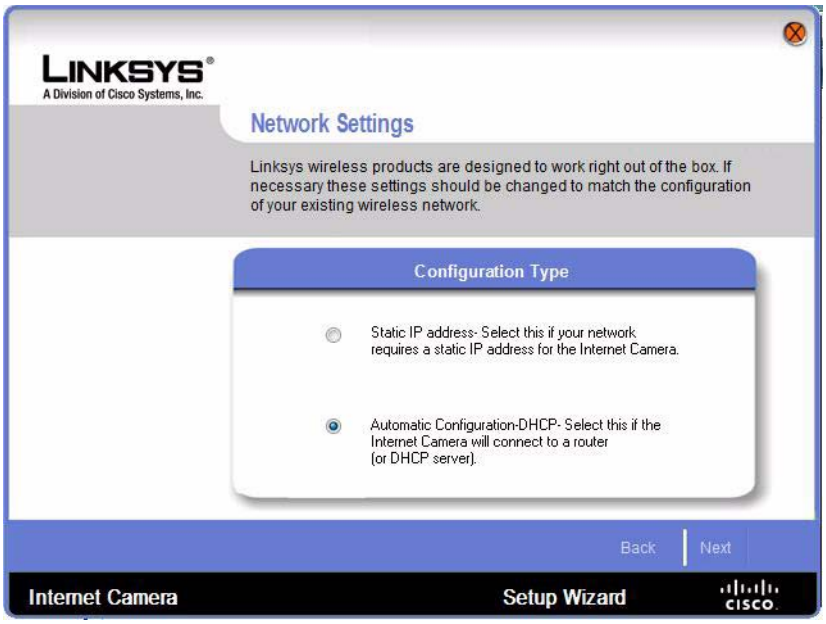
7. On the *Basic Settings* screen, change the following settings:



- **Camera Name** Enter a unique name for the camera, up to 15 characters in length. Unique names are helpful when you are using multiple cameras on the same network.
- **Description** Enter a description, up to 32 characters in length, with additional information, such as the location of the camera.
- **Time Zone** Select the time zone that corresponds with the camera's location.
- **Date** Enter the current date in the provided fields.
- **Time** Enter the current time in the provided fields.

You have now finished identifying the camera and making the basic settings. To continue configuring the camera's IP address, click **Next**.

1. If you want to assign the IP address, then select **Static IP address**, otherwise leave the default setting, Automatic Configuration DHCP. Click **Next** to continue.


LINKSYS
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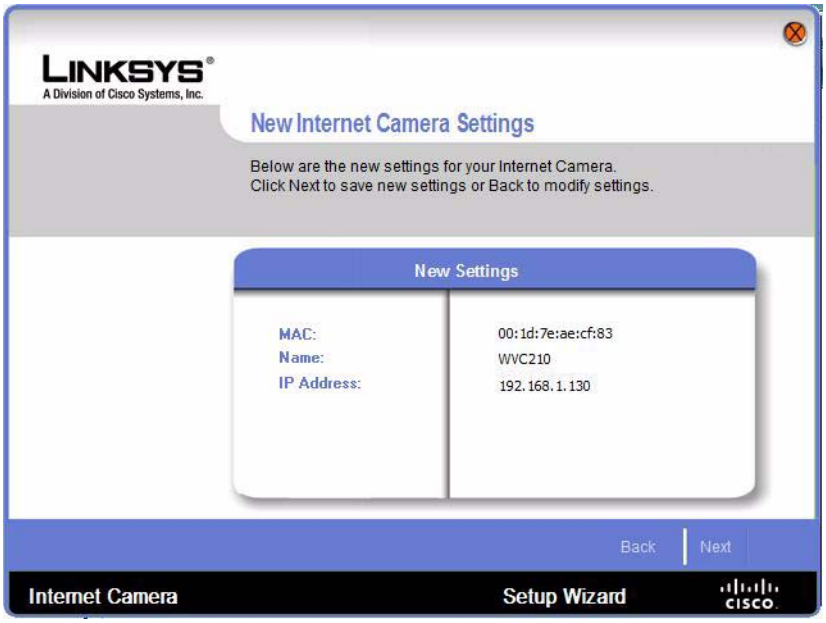
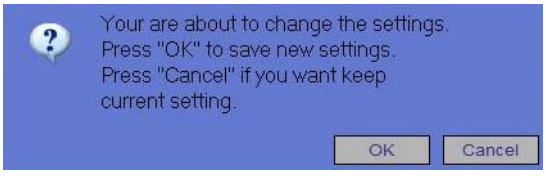
Network Settings
Linksys wireless products are designed to work right out of the box. If necessary these settings should be changed to match the configuration of your existing wireless network.
Configuration Type
Static IP address- Select this if your network requires a static IP address for the Internet Camera.
Automatic Configuration-DHCP- Select this if the Internet Camera will connect to a router (or DHCP server).
Back
Next
Internet Camera
Setup Wizard
cisco

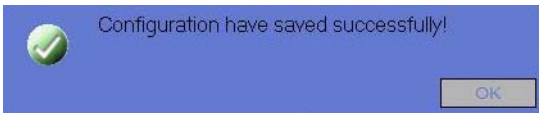
2. The New Internet Camera Settings screen will appear and display the camera's settings. Click **Next** to continue or click **Back** to make changes.



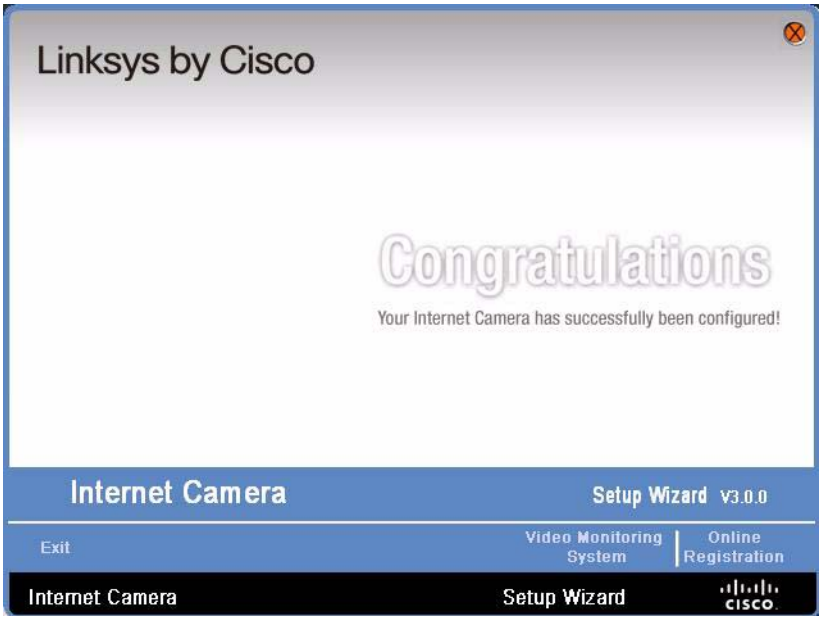
3. A confirmation window will appear, click **OK** to confirm the settings.


Your are about to change the settings.
Press "OK" to save new settings.
Press "Cancel" if you want keep current setting.
OK
Cancel

4. A Configuration successfully saved window will appear, click **OK** to continue.

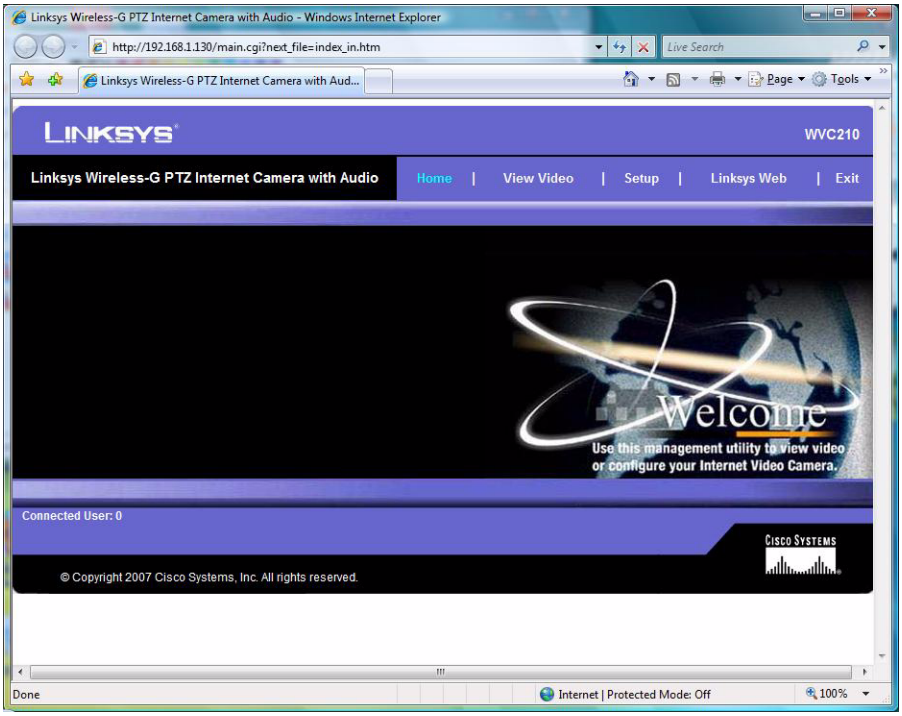


5. The Wizard will now finish with a *Congratulations* screen. Click **Exit** to automatically launch your default web browser and proceed to the Home page login screen.



6. The login prompt will appear, enter **admin** in both the *User name* and *Password* fields.

7. The Linksys Wireless-G PTZ Internet Camera home page launches.


Linksys Wireless-G PTZ Internet Camera with Audio - Windows Internet Explorer
http://192.168.1.130/main.cgi?next_file=index_in.htm
Live Search
Linksys Wireless-G PTZ Internet Camera with Aud...
Page
Tools
LINKSYS
WVC210
Linksys Wireless-G PTZ Internet Camera with Audio
Home | View Video | Setup | Linksys Web | Exit
Welcome
Use this management utility to view video or configure your Internet Video Camera.
Connected User: 0
Cisco Systems
© Copyright 2007 Cisco Systems, Inc. All rights reserved.
Done
Internet | Protected Mode: Off
100%

8. The basic installation procedure is now complete. For further information on software for the Linksys Cameras, consult the *Linksys Video Surveillance Application User Guide*. You may now proceed with Chapter 7, "Configuring Software."

Configuring Software

This section describes the basic functions of the camera software. For more advanced information, please see the *Linksys Video Surveillance Application User Guide*.

NOTE: By default the camera is set to receive an IP address from a DHCP server. If you do not have a DHCP server on your network, you can set a static IP address by pressing the Reset button on the camera for less than 10 seconds. A default IP address of 192.168.1.99 will be assigned to the camera..

To determine if you have a DHCP server on your network, consult your network administrator. If you do not have a DHCP server, access your camera through the default IP address.

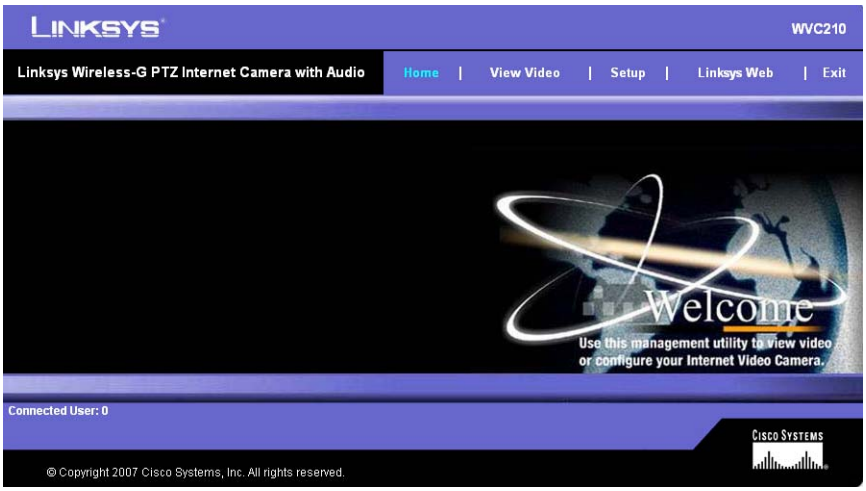
Open your web browser and enter the assigned IP address in *Address* field in the following format:

http://192.168.1.99

Press the **Enter** key and the *Login* screen will appear. The first time you open the web based utility, enter **admin (**the default user name) in the *User name* field and leave the password blank. Click the **OK** button. You can set a password later from the *Setup* > *Users* screen.

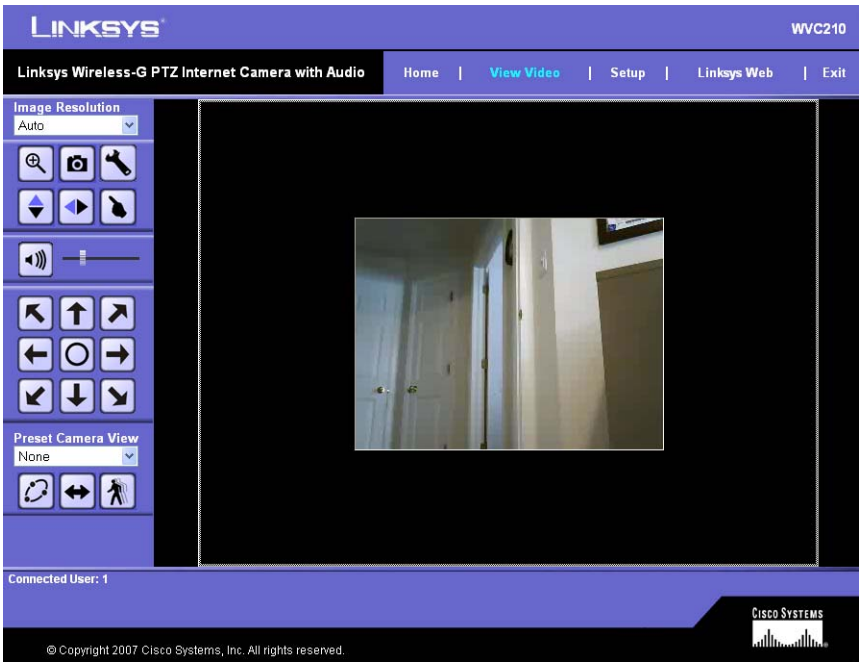
Home

The *Home* screen is the first screen that is displayed. The Home screen identifies the camera type in the upper right hand corner, and has tabs across the top of the screen labeled **View Video**, **Setup**, **Linksys Web**, and **Exit**.


LINKSYS
WVC210
Linksys Wireless-G PTZ Internet Camera with Audio
Home | View Video | Setup | Linksys Web | Exit
Welcome
Use this management utility to view video or configure your Internet Video Camera.
Connected User: 0
Cisco Systems
© Copyright 2007 Cisco Systems, Inc. All rights reserved.

View Video

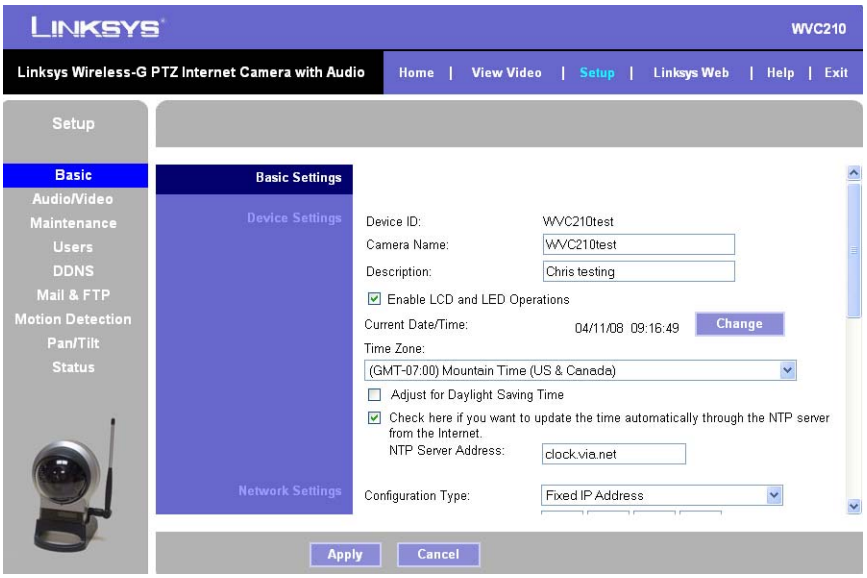
The View Video tab is the main screen for controlling the real-time view of your camera.



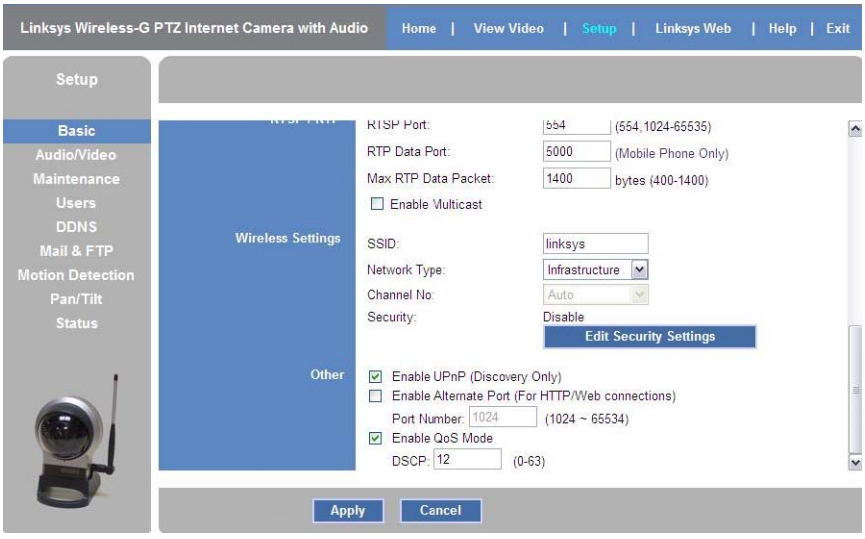
From this screen you can control the basic functions of the camera.

Setup

The Setup Tab on the top of the screen has a number of categories along the left side of the window, and is where most of the cameras functionality in configured. The Setup Window is a scrolling window, the following graphic shows the top half of the window.



The following graphic shows the bottom half of the window.



The following section describes all of the vertical tabs that are available under the Setup tab.

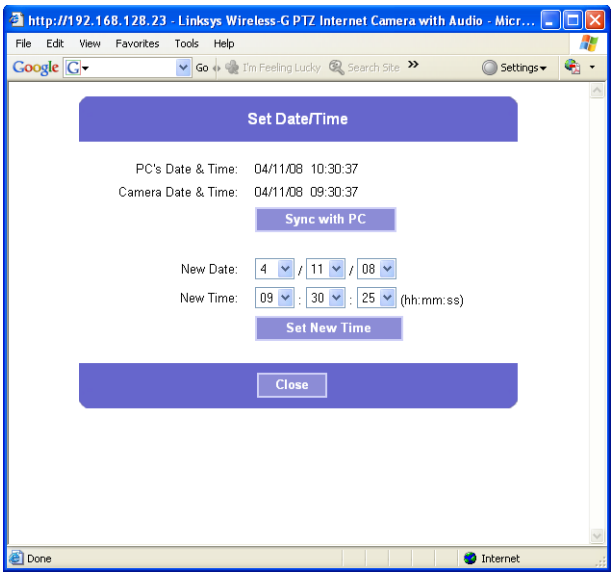
Basic

Clicking on the Basic Tab shows the **Basic Settings**, **Device Settings**, **Network Settings, RTSP/RTP, Wireless Settings**, and **Other** settings for the camera.

Device Settings

- **Device ID** — This displays the ID for the camera. This is used by the setup wizard, viewer and the recorder utility to identify the camera.
- **Camera Name** — Enter the preferred name for the camera. The camera name must not exceed 15 alphanumeric characters.
- **Description** — This field is used for entering a description, such as the location of the camera. Entering a description will help you identify the camera. It must not exceed 32 alphanumeric characters.
- **Enable LCD** and **LED Operations** — Enable this if you want to turn on the LCD or LED.
- **Current Date/Time** — It displays the current date and time. If it's not correct, click the **Change** button to modify the time settings.

Set Date/Time


http://192.168.128.23 - Linksys Wireless-G PTZ Internet Camera with Audio - Micr...
File Edit View Favorites Tools Help
Google
Settings
Set Date/Time
PC's Date & Time: 04/11/08 10:30:37
Camera Date & Time: 04/11/08 09:30:37
Sync with PC
New Date: 4 / 11 / 08
New Time: 09 : 30 : 25 (hh:mm:ss)
Set New Time
Close
Done
Internet

- **PC's Date and Time** — Displays the current time of the PC connected to the web-based utility.
- **Camera Date and Time** — Displays the current time as configured on the camera.
- **Sync with PC**— Allows you to synchronize the camera to the clock on the PC connected to the web.based utility.
- **New Date** — Allows you to manually enter the date for the camera.

- **New Time** — Allows you to manually enter a new clock setting for the camera.
- **Set New Time** — Use this button to implement the new date and/or time setting.
- **Time Zone** — Choose the time zone for your location from the drop-down list.
- **Adjust for Daylight Saving Time** — Select this option if your location is currently using Daylight Saving Time.

NOTE: You must uncheck the Adjust for Daylight Saving Time check box manually when Daylight Saving Time ends in your time zone.

- **Check here if you want to update the time automatically through the NTP Server on the Internet** Enable or disable the time server feature as required. If enabled, the camera will contact a network time server at regular intervals and update its internal timer.
- **NTP Server Address** Enter the address of the NTP Server.

NOTE: If connecting to a router, it may be necessary to enable port forwarding.

Network Settings

Configuration Type

- **Obtain An IP Address Automatically** — The camera defaults to this option, allowing a DHCP server on your network to automatically assign the camera an IP address.
- **Fixed IP Address** — Use this option to assign a fixed (static) IP address to the camera. Assign an IP address that is unique to your local network. When using a fixed IP address, you must configure the IP Address, Subnet Mask, Gateway and DNS.
- **IP Address** — The IP address assigned to the camera is displayed.
- **Subnet Mask** — The Subnet Mask assigned to the camera is displayed.
- **Gateway** — IP address of the gateway router between this device and management stations that exist on other network segments.
- **Primary DNS** — The IP address of your ISP's primary server, which translates the names of websites into IP addresses.
- **Secondary DNS** — The IP address of your ISP's secondary server, which translates the names of websites into IP addresses.

RTP/RTSP

RTSP (Real Time Streaming Protocol) is a standard for connected client(s) to control streaming data (MPEG-4) over the World Wide Web.

RTP (Real-Time Transport Protocol) is an Internet protocol used for transmitting single real-time multimedia data such as audio and video to a select group of connected clients. RTSP uses RTP to format packets of multimedia content.

- **RTSP Port** — Enter the RTSP Port number (between 1024 to 65535) in the field provided. The default RTSP port is **554**.
- **RTP Data Port** — The camera's data port number has been pre-configured and can be used for multicasting. It does not normally need to be re-configured. If a port number does need to be changed, please contact your network administrator. If a change is necessary, enter the data port number (1024 to 65535) in the field provided. The default RTP port is **5000**.
- **Max RTP Data Packet** — This allows you to define the maximum size of the RTP data packets. The length can be between 400 to 1400 bytes. The default value is **1400** bytes.
- **Enable Multicast** — The camera's Video and Audio IP Addresses have been pre-configured and can be used for multicasting. Normally these settings do not need to be reconfigured. If an address does need to be changed, please contact your network administrator.

Wireless Settings

SSID — Enter the network's SSID or network name here.

Network Type — Select the network's mode, Infrastructure or Ad-hoc.

Channel No — If the camera is set to ad-hoc mode, select its channel setting from the drop-down menu.

Security — Click the **Edit Security Settings** button to display the *Wireless Security* screen.

Security Mode

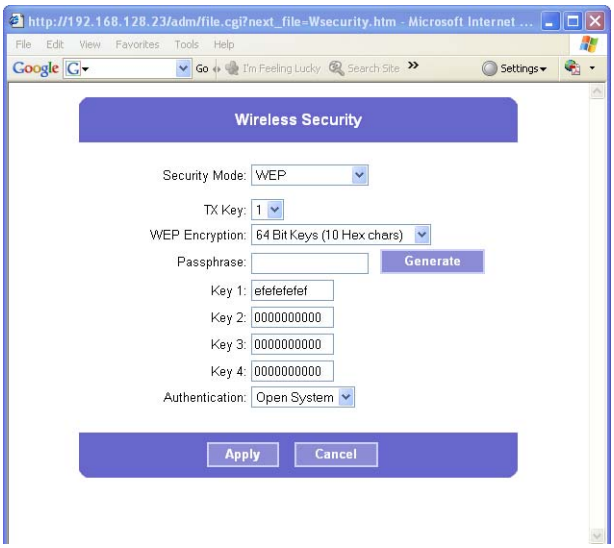
Select the appropriate option based on your wireless network configuration.

Disabled

This option implements no security on your wireless network. Data is not encrypted before transmission.

WEP

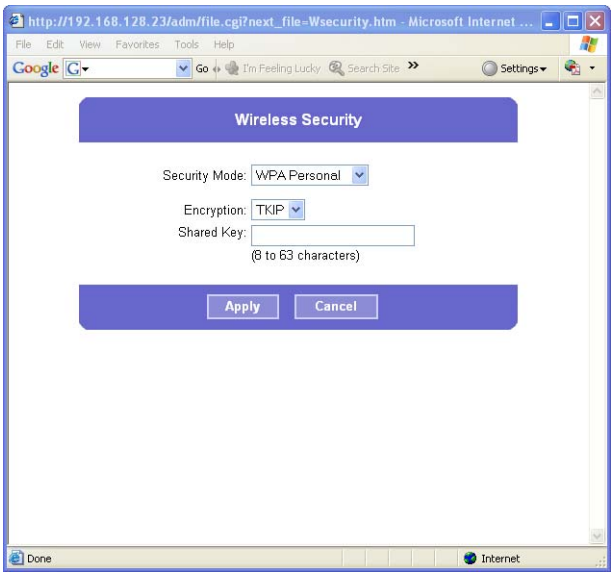
WEP is a basic encryption method, which is not as secure as later methods such as WPA-Personal or WPA2 Personal.



- **TX Key** — Select the number of the key used on the wireless network.
- **WEP Encryption** — Select the appropriate option for key length based on your network settings.
- **Passphrase** — Type in the passphrase used to generate WEP keys on your network and click the **Generate** button.
- **Key 1-4** — Key values can be entered in manually or generated from a passphrase.
- **Authentication** — Select the appropriate authentication type used on the wireless network.

WPA Personal

This method offers two encryption methods, TKIP and AES, with dynamic encryption keys



- **Encryption** — Select between TKIP and AES.
- **Shared Key** — Enter the shared key used for accessing the wireless network.

WPA2 Personal

Encryption is limited to AES, and there is a field to enter a shared key.

Other

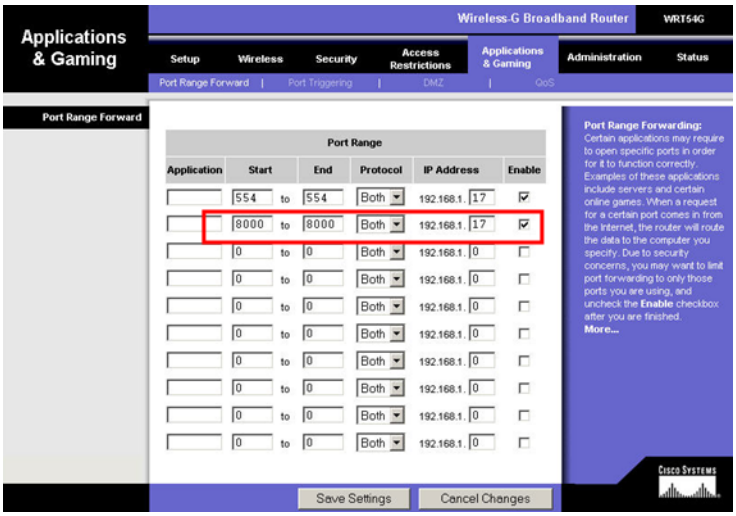
- **Enable UPnP (Discover Only)**— If enabled, the camera will broadcast its availability through Universal Plug and Play protocol. UPnP compatible systems such as Windows XP will then be able to detect the presence of the camera.
- **Enable Alternate Port** — If enabled, HTTP connections (from your web browser, viewer and recorder utility) can use an alternative port instead of port 80 (the standard HTTP port) to access the camera.
- **Enable QoS Mode**—Check to enable Quality of Service (QoS) for media streams.
- **DSCP**—If QoS is enabled, please enter the Differentiated Services Code Point (DSCP) to be used on processing QoS packets. The default value is 12.

To set up port forwarding use the following procedure:

1. Enable the alternate port by checking the box, then enter a port number in the field.
2. Click on Apply and close the page. When you open the URL to the camera, you now must specify the port number, for example:

   http://192.168.128.23:1024

3. Connect to your router and go to the Port Forwarding page. Add the IP address of your camera as well as the port that you specified in the camera set up. For example:

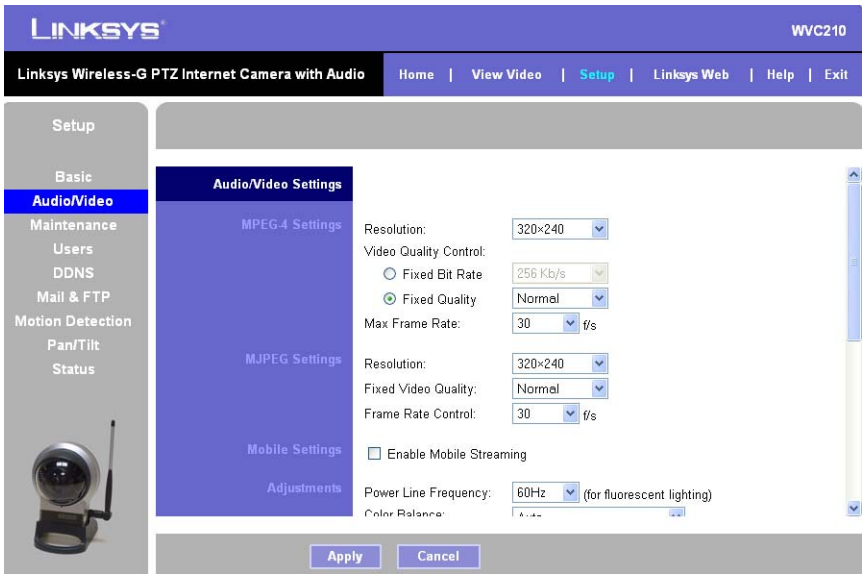

Applications & Gaming
Wireless-G Broadband Router
WRT54G
Setup
Wireless
Security
Access Restrictions
Applications & Gaming
Administration
Status
Port Range Forward
Port Triggering
DMZ
QoS
Port Range Forward
Port Range
Application
Start
End
Protocol
IP Address
Enable
Port Range Forwarding:
Certain applications may require to open specific ports in order for it to function correctly. Examples of these applications include servers and certain online games. When a request for a certain port comes in from the Internet, the router will route the data to the computer you specify. Due to security concerns, you may want to limit port forwarding to only those ports you are using, and uncheck the Enable checkbox after you are finished.
More...
Save Settings
Cancel Changes

4. Click on Save Settings. At this point, to connect to the camera you can type in the IP address of the router, with the port number, for example:

   http://192.168.203.12:1024

Audio/Video

Clicking on the **Audio/Video** Tab shows the **MPEG-4 Settings**, **MJPEG Settings**, **Mobile Settings, Adjustments, Video Options**, and **Audio Options** for the camera.



NOTE: Higher video quality settings and higher frame rate settings require more bandwidth.

MPEG-4 Settings

MPEG is the designation for a group of audio and video coding standards and related technology agreed upon by the ISO/IEC. The primary uses for the MPEG-4 standard are web (streaming media) and CD distribution, and broadcast television.

- **Resolution** — Select the desired video resolution setting. The default resolution is set to **320x240**.
- **Video Quality Control** — Choose one of the following:
  - **Fixed Bit Rate** — Select the desired fix bit rate. The default bit rate is set to **256 Kbps**.
  - **Fix Quality** — Select the desired fix quality. The default fix quality is set to **Normal**.
- **Max Frame Rate** — Select the desired maximum frame rate. The default maximum frame rate is set to **30 fps**.

MJPEG Settings

MJPEG (Motion JPEG) is a video codec where each video field (frame) is separately compressed into a JPEG image.

- **Resolution** — Select the desired video resolution format. The default resolution is set to **320x240**.
- **Fixed Video Quality** — Select the desired fix quality. The default fix quality is set to **Normal**.
- **Frame Rate Control** — Select the desired frame rate. The default frame rate is set to **30**.

Mobile Settings

- **Enable Mobile Streaming** — Enable streaming video for the mobile devices by selecting this option.
  - **Resolution** — The default resolution is set to **160x120**.
  - **Video Quality Control** — Choose from one of the following options:
    - **Constant Bit Rate** — Select the desired fix bit rate. The default bit rate is set to **32 Kbps**.
    - **Fix Quality** — Select the desired fix quality. The default fix quality is set to **Normal**.
  - **Max Frame Rate** — Select the desired maximum frame rate. The default maximum frame rate is set to **15 fps**.
  - **Access Code** — Entered at the end of a URL to access the live video from the camera through cell phone connection; for example:

    `rtsp://<IP Address>/access_code`

Adjustments

- **Power Line Frequency** — Select the power line frequency (50Hz or 60Hz) used in your region, to improve the picture quality under fluorescent lighting.
- **Color Balance** — Select the suitable white balance option as you desired.
- **Exposure** — If necessary, you can adjust the exposure to obtain a better image. You can select a sharpness value between -3 and 3.
- **Sharpness** — Select the desired option for the sharpness. You can select a sharpness value between -3 and 3.

Video Options

- **Flip Image** — Enable this feature if you want to rotate the image 180° on the vertical axis.
- **Mirror Image** — Enable this feature if you want to rotate the image 180° on the horizontal axis.
- **Enable Time Stamp** — If you want to display a time stamp on the video, enable this feature by checking the check box.
- **Enable Text Display** — If you want to display text on the video, enable this feature by checking the check box. The text can be up to 20 characters in length. This feature is often used to identify the camera location when multiple cameras are installed.

Audio Options

Enable Audio —Enable audio by checking the check box.

Audio Mode Settings	Function
Simplex — Talk Only	Enables the speaker jack
Simplex — Listen Only	Enables the microphone jack
Half Duplex — Talk or Listen (Not simultaneously)	Enables the speaker and microphone jack but only one can be used at a time
Full Duplex — Talk and Listen (Can be simultaneously)	Enables the speaker and microphone jack and both can be used simultaneously

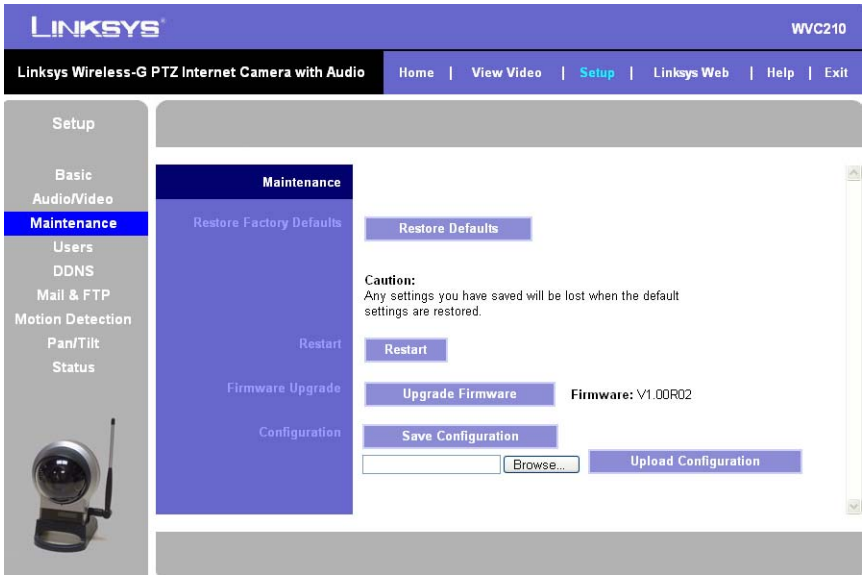
Audio Type — When the microphone is enabled, this drop down menu allows you to select the audio compression type.

Compression Settings	Description
G.726 (WVC200 only)	Default audio compression algorithm, uses 32 Kbps of bandwidth with quality similar to G.711 but using only half of the bandwidth
G.711 A-Law (WVC210 only)	A standard compression algorithm that uses 64 Kbps of bandwidth and is primarily used in Europe
G.711 u-Law (WVC210 only)	A standard compression algorithm that uses 64 Kbps of bandwidth and is primarily used in North America and Japan

Enable Speaker — Check the box to activate an optional external speaker.

Maintenance

Clicking on the Maintenance tab shows options for **Restore Factory Defaults**, **Restart**, **Firmware Upgrade**, and **Configuration**.



Restore Factory Defaults

- **Restore Defaults**— This option restores the camera to the factory default settings.

Restart

- **Restart** — This option restarts the camera.

Firmware Upgrade

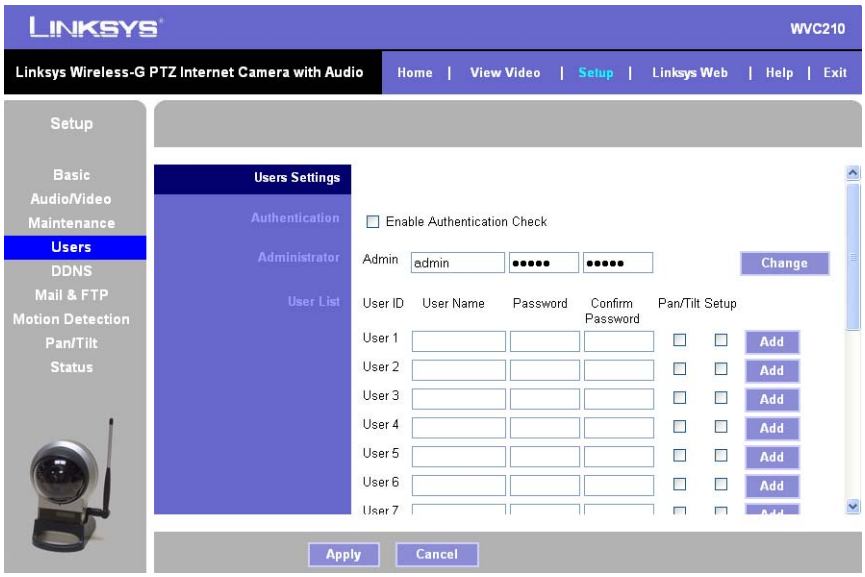
Upgrade Firmware — This option is used to update the camera's firmware. This is detailed in Chapter 5.

Configuration

- **Save** — Use this option to save a configuration file containing all of the current camera management settings.
- **Browse** — Use this option to locate a previously saved configuration file.
- **Upload** — Use this button to upload a previously saved configuration file into the camera.

Users

Clicking on the Users tab shows options for **Authentication**, **Administrator**, and **User List**.



Authentication — Check the box to enable authentication check.

Administrator

- **Admin** — The default administrator name cannot be changed but the password can and should be changed for security purposes. To change the password, enter the desired password in the *Password* and *Confirm Password* fields. Click the **Change** button to apply the change.

User List

- **User ID** — The User ID cannot be modified.

- **User Name** — Enter the desired user name.
- **Password** — Enter the desired password in this field.
- **Confirm Password** — Retype the password in this field.
- **Pan/Tilt** — Click to allow user control PAN and TILT function.
- **Setup** — Click to authorize user control as an administrator.

Click the **Add** button to add or modify a new User ID. Delete a User ID by selecting the User ID fields and backspacing through the information.

DDNS

The **DDNS** tab contains only DDNS Settings.

- **Enable DDNS** — This option will enable Dynamic Domain Name Service (DDNS). When used with a DDNS service provider, you can access your camera over the Internet using a domain name instead of an IP address.
- **Service Provider** — Select the service provider that you have an account with. If you do not have an account, you can select a service provider and click the Web Site button.
- **Host Name** — Enter the host name (Domain Name) allocated to you by the DDNS Server provider.
- **Account** — Enter the login name for the DDNS account.
- **Password** — Enter the password for the DDNS account.

- **Check WAN IP Address** — This option allows you to set how often the device should check to see if the Internet IP address has changed. If the IP address has changed, the DDNS Server will be notified.

NOTE: To complete the DDNS Service setup, port forwarding needs to be configured on your router.

Mail & FTP

Clicking on the **Mail & FTP** Tab shows options for **E-mail Alert** and **FTP Alert**.

E-mail Alert

NOTE: Only one SMTP server is used, even if both the primary and secondary SMTP servers are enabled.

Primary SMTP Server

- **SMTP Mail Server** — Enter the address of the SMTP (Simple Mail Transport Protocol) Server to be used to send e-mail.
- **Port** — Enter the port number for the mail server, the default is **25**.
- **Authentication** — Check the box if your mail server requires authentication and enter the following options:
  - **Account Name**— Enter the account name to be used on the email server.
  - **Password** — Enter the password associated with the account name.

Secondary SMTP

- **Secondary SMTP** — Check the box to upload to the Secondary SMTP if the camera can not connect to the primary SMTP.
- **SMTP Mail Server** — Enter the address of the SMTP (Simple Mail Transport Protocol) Server to be used to send e-mail.
- **Port** — Enter the port number for the mail server, the default is **25**.
- **Authentication** — Check the box if your mail server requires authentication and enter the following options:
  - **Account Name**— Enter the account name to be used on the email server.
  - **Password** — Enter the password associated with the account name.

E-mail Setup

- **Send To** — Enter at least one (1) e-mail address; the 2nd and 3rd addresses are optional. The e-mail alert will be sent to the e-mail address or addresses specified here.
- **Show "From" as** — Enter the e-mail address to be shown in the *From* field when the e-mail is received.
- **Subject** — Enter the desired text to be shown as the subject for the e-mail when it is received

FTP Alert

NOTE: Only one FTP server is used, even if both the primary and secondary FTP servers are enabled.

Primary FTP

- **FTP Server** — Enter the address of the primary FTP Server.
- **Login Name** — Enter the login name associated with the specified primary FTP server.
- **Password** — Enter the password associated with the login name for the primary FTP server.
- **Enable Passive Mode** — Check the box to enable the Passive mode feature. (This is a more secure mode of the ftp protocol)
- **File Path Name** — Enter the desired file path name on the primary FTP server.

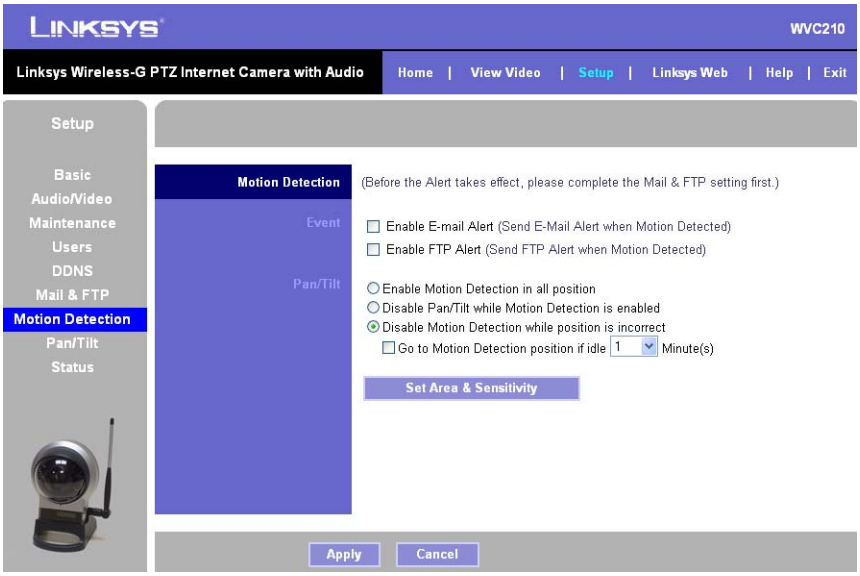
Secondary FTP

- **Secondary FTP** — Enable this option to allow the camera to connect to a secondary FTP server if the primary FTP server is not available

- **FTP Server** — Enter the address of the secondary FTP Server.
- **Login Name** — Enter the login name associated with the secondary FTP server.
- **Password** — Enter the password associated with the login name for the secondary FTP server.
- **Enable Passive Mode** — Check the box to enable the Passive mode feature.
- **File Path Name** — Enter the desired file path name on the secondary FTP server.

Motion Detection

Clicking on the Motion Detection Tab shows options for **Event** and **Pan/Tilt**.



Event

NOTE: Complete the Mail and FTP Setup prior to enabling alerts.

- **Enable E-mail Alert** — If enabled, e-mail alert with attachment are sent when motion is detected.
- **Enable FTP Alert** — If enabled, FTP alert with attachment are sent when motion is detected.

Checking either alert box will display options for the attachment.

- **Interval** — Defaults to 2 minutes before detecting the next event
- **Attachment Type** — JPEG Image or Video

- **Frame Rate**— Defaults to 1 fps
- **Pre-Capture Length** — Defaults to 1 second
- **Post Capture Length** — Defaults to 1 second

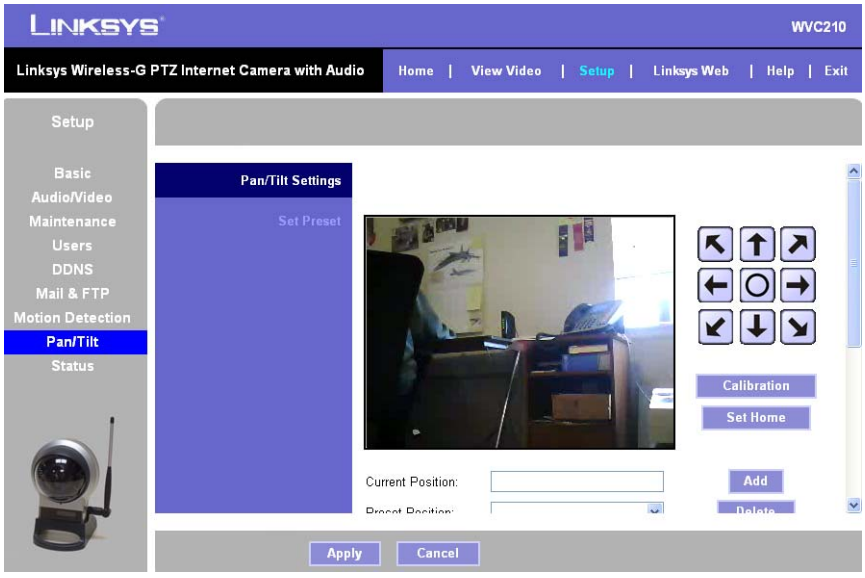
Pan/Tilt

- This option is only available if your camera is fitted with a Pan/Tilt control. If available, select the desired option to resolve conflict between the Pan/Tilt and Motion Detection features.
- Check the box to set the idle time for motion detection position, this defaults to 1 minute.
- **Set Area & Sensitivity** — Click this button to enter the motion detection sub-screen. You can set the area or areas of the video image to be examined, and adjust the sensitivity of detection for each area.

NOTE: Motion detection can be triggered by rapid changes in lighting conditions, as well as by moving objects. For this reason, it should only be used indoors.

Pan/Tilt

Clicking on **Pan/Tilt** shows the **Set Preset, Pan/Tilt Control,** and **Rotation Sequence** settings for the camera.



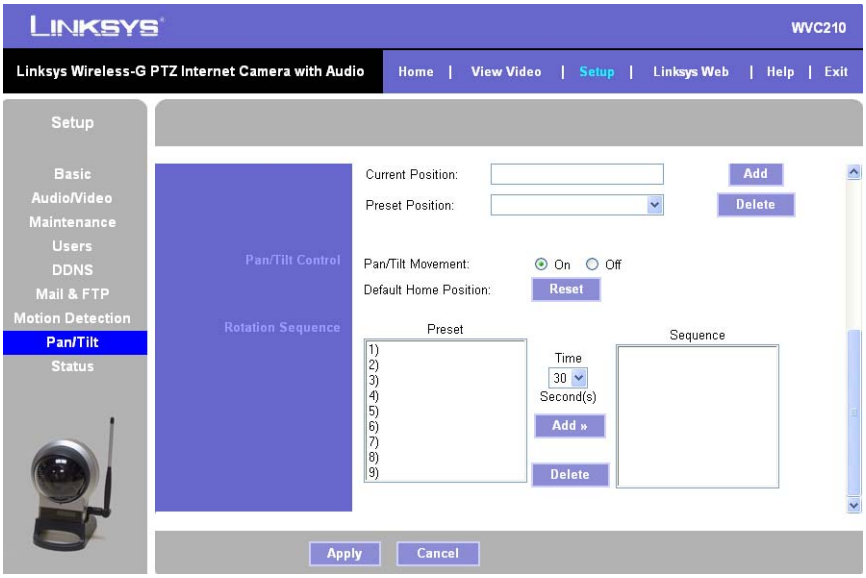
Set Preset

- **Set Positions** — Set the desired position through adjusting the control panel.
- **Calibrate Button** — Click this button to reset the calibration of Pan/Tilt area.

- **Set Home Button**— Set the desired position and then click this button to set Home position.
- **Current Position** — Name the current desired position and then click the **Add** button to add into the preset list.
- **Preset Position**— Select the preset position you don't need and then click the **Delete** button to remove.

Pan/Tilt Control

Pan/Tilt Control and Rotation Sequence are found at the lower part of the scrolling window.



- **Pan/Tilt Movement** — Check **On** if you want to use the Pan/Tilt Movement feature.
- **Default Home Position** — Click this button to reset Default Home Position.

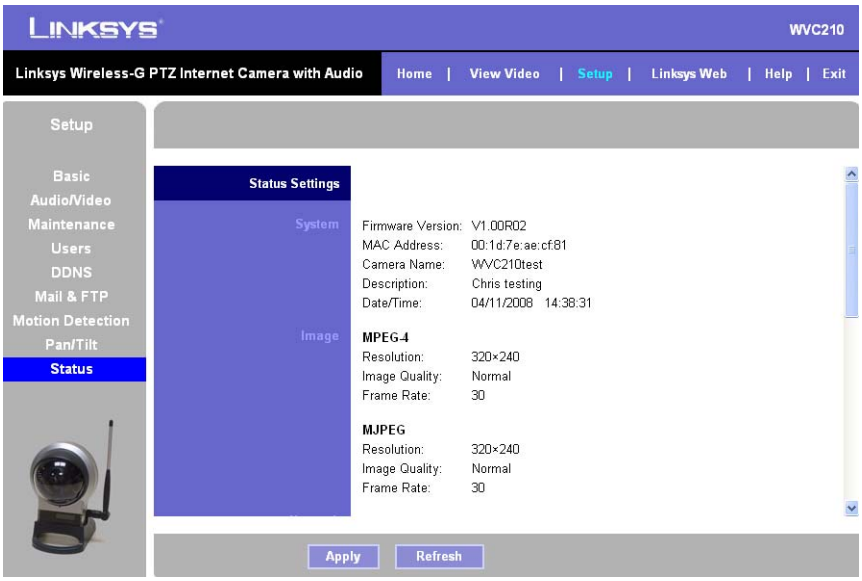
Rotation Sequence

- **Rotation Sequence Windows** — This feature determines how the camera will move when it is set to "Rotate". You can set a number of Preset Positions; the camera will go to the first position, then move through the list of preset positions until it is finished. The camera will stop at the last position in the list.
  - To create the Preset Sequence, select the desired Preset Position in the left column, and click the **Add >>** button. Repeat until the desired sequence is complete. Note that you can add the same Preset Position more than once; this can be used to make the camera stay longer at one position.
  - To delete a position from the Sequence, select the desired position and click the **Delete** button.
- **Time** — This determines how long the camera will stay at each position while executing the sequence. Set this to the desired value.

Status

Clicking on the **Status** Tab shows options for **System, Image, Network, Wireless, Syslog,** and **Log.**

This is a scrolling window, the top half appears as follows:



System

- **Firmware Version** — The version of the firmware currently installed is displayed.
- **MAC Address** — This displays the MAC address of the camera.
- **Camera Name** — This displays the name of the camera, as defined on the *Basic* > *Device Settings* screen.
- **Description** — This displays the description of the camera, as defined on the *Basic* > *Device Settings* screen.
- **Date/Time** — This displays the current date/time as configured on the camera.

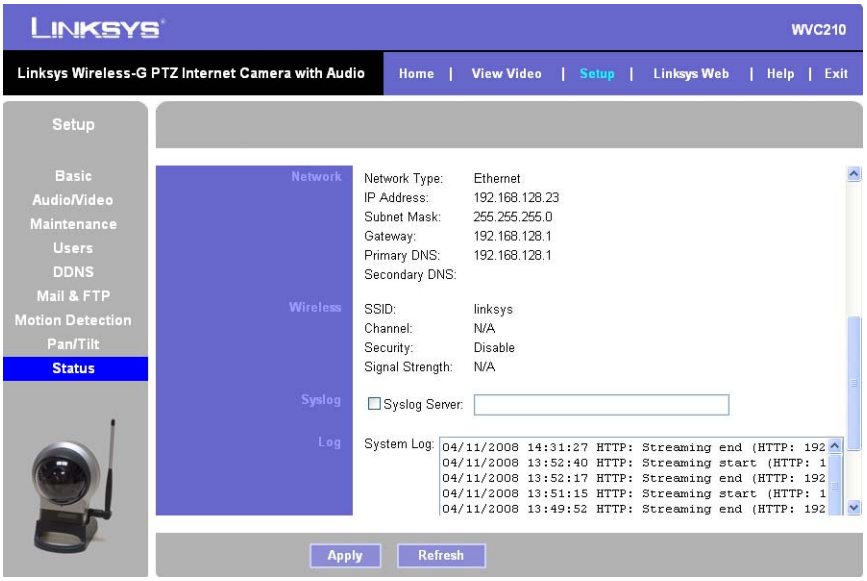
Image

- **MPEG-4**
  - **Resolution** — This displays the image size of the video stream.
  - **Image Quality** — This displays the image quality of the video stream.
  - **Frame Rate** — This displays the frame rate of the video stream.
- **MJPEG**

- **Resolution** — This displays the image size of the video stream.
- **Image Quality** — This displays the image quality of the video stream.
- **Frame Rate** — This displays the frame rate of the video stream.

Network

The lower part of the scrolling window continues:



- **Network Type** — This displays the type of network the camera is connected to.
- **IP Address** — This displays the IP address assigned to the camera.
- **Subnet Mask** — This displays the subnet mask assigned to the camera.
- **Gateway** — This displays the IP address of the gateway used by the camera.
- **Primary DNS** — This displays the IP address of the primary Domain Name Server used by the camera.
- **Secondary DNS** — This displays the IP address of the secondary Domain Name Server used by the camera.

Wireless

NOTE: Wireless information is only found on the WVC210 camera.

- **SSID** — This displays the wireless network name (SSID) used by the camera.

- **Channel** — This displays the wireless channel used by the camera.
- **Security** — This indicates if wireless security is being used by the camera.
- **Signal Strength** — This shows the wireless signal strength.

Syslog

- **Syslog Server** — Check this to enable the Syslog server, and then enter the IP address of your Syslog server.

Log

- **System Log** — This displays system activities. Click the Clear Log button to erase all the entries in the System Log.

Linksys Web

This tab opens a browser window and connects you to the Linksys Web-site where you can find information on a number of topics, helpful information, downloads, and several other items.

Exit

Click Exit to leave the camera interface and close the browser window.

Troubleshooting

Questions and Answers

This appendix provides solutions to problems that may occur during the installation and operation of the Wireless-G Internet Camera. Read the description below to solve your problems. If you can't find an answer here, check the Linksys website at *www.linksys.com*.

I can't connect to the Wireless Network Camera with my Web Browser to configure it.

It is possible that your PC's IP address is not compatible with the IP address of the Wireless Network Camera. Use the Linksys Video Monitoring System to configure the Wireless Network Camera with a valid IP address.

The Linksys Video Monitoring System doesn't list any Wireless Network Cameras.

Check the following:

- The Wireless Network Camera is installed, LAN connections are OK, it is powered ON and startup is complete.
- Ensure that your PC and the Wireless Network Camera are on the same network segment. (If you don't have a router, this could be the case.)
- Ensure that your PC has the TCP/IP network protocol loaded. In Windows, this is done by using Control Panel-Network.

If an entry for TCP/IP -> Network card is not listed, use Add - Protocol - Microsoft - TCP/IP to add it. You then need to select the new entry (TCP/IP -> Network card), click Properties, and configure the IP Address tab. If your LAN has a DHCP Server, you can select "Obtain an IP Address automatically". Otherwise, you must select "Specify an IP Address", and enter values for IP Address, Subnet Mask, and Gateway. All devices on your LAN must use compatible values. Remember that each device needs a unique IP Address, and the same Subnet Mask.

When I try to connect to the Wireless Network Camera, I get prompted for a user name and password.

You should be prompted for a user name and password when you first connect to the camera. Enter the Administrator ID and Password set on the User screen. The Username/Password prompt indicates that the Administrator has restricted access to specified users. Ask the Administrator for your Username and Password. If this has not been set, it should still be the default of *admin/admin*.

I can't connect to the Wireless Network Camera using a Wireless connection.

If a LAN cable is connected to the LAN port, the Wireless interface is disabled. Only one interface can be active. In order to switch from wired to wireless, or wireless to wired, the camera will need to be rebooted to switch modes.

Check that your PC and the Wireless Network Camera have compatible Wireless settings.

- Mode (Infrastructure or Ad-hoc) must be correct.

- SSID must match.
- Wireless security settings must match.
- In Ad-hoc mode, the Channel should match, although this is often not required.

Video quality may suddenly deteriorate.

This can happen when an additional viewer connects to the Wireless Network Camera, overloading the camera or the available bandwidth. The image size and quality can be adjusted to cater for the required number of viewers and the available bandwidth.

The motion detection feature doesn't send me any e-mails.

It may be that the SMTP (Simple Mail Transport Protocol) server used by the camera to send the e-mail will not accept mail. (This is to prevent Spam being sent from the server.). Try using a different SMTP server, or contact your ISP to see if SMTP access is being blocked.

You must use a static IP address (you can copy the DHCP Address), but the DNS server must be that of the ISP and not of the router. You can find this address in the router's status log for WAN IP Address.

Using the motion detection feature, I receive e-mails which don't show any moving objects.

The motion detection feature doesn't actually detect motion. It compares frames to see if they are different. Major differences between frames are assumed to be caused by moving objects.

But the motion detector can also be triggered by sudden changes in the level of available light or movement of the camera itself.

Try to avoid these situations. The motion detection feature works best in locations where there is good steady illumination, and the camera is mounted securely. This feature can NOT be used if the camera is outdoors.

The image is blurry.

Try cleaning the dome, or adjusting the Image Quality setting on the Image screen. Video created will the lower settings will contain less detail; this is the trade-off for using less bandwidth.

Windows Help

Almost all wireless products require Microsoft Windows. Windows is the most used operating system in the world and comes with many features that help make networking easier. These features can be accessed through Windows Help and are described in this appendix.

TCP/IP

Before a computer can communicate with an access point or router, TCP/IP must be enabled. TCP/IP is a set of instructions, or protocol, all PCs follow to communicate over a network. This is true for wireless networks as well. Your PCs will not be able to utilize wireless networking without having TCP/IP enabled. Windows Help provides complete instructions on enabling TCP/IP.

Shared Resources

If you wish to share printers, folders, or files over your network, Windows Help provides complete instructions on using shared resources.

Network Neighborhood/My Network Places

Other PCs on your network will appear under Network Neighborhood or My Network Places (depending upon the version of Windows you're running). Windows Help provides complete instructions on adding PCs to your network.

Glossary

This glossary contains some basic networking terms you may come across when using this product. For more advanced terms, see the complete Linksys glossary at http://www.linksys.com/glossary.

Access Point - A device that allows wireless-equipped computers and other devices to communicate with a wired network. Also used to expand the range of a wireless network.

Ad-hoc - A group of wireless devices communicating directly with each other (peer-to-peer) without the use of an access point.

AES (Advanced Encryption Standard) - A security method that uses symmetric 128-bit block data encryption.

Bandwidth - The transmission capacity of a given device or network.

Bit - A binary digit.

Boot - To start a device and cause it to start executing instructions.

Broadband - An always-on, fast Internet connection.

Browser - An application program that provides a way to look at and interact with all the information on the World Wide Web.

Byte - A unit of data that is eight bits long

Cable Modem - A device that connects a computer to the cable television network, which in turn connects to the Internet.

Daisy Chain - A method used to connect devices in a series, one after the other.

DDNS (Dynamic Domain Name System) - Allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (e.g., www.xyz.com) and a dynamic IP address.

Default Gateway - A device that forwards Internet traffic from your local area network.

DHCP (Dynamic Host Configuration Protocol) - A networking protocol that allows administrators to assign temporary IP addresses to network computers by "leasing" an IP address to a user for a limited amount of time, instead of assigning permanent IP addresses.

DMZ (Demilitarized Zone) - Removes the Router's firewall protection from one PC, allowing it to be "seen" from the Internet.

DNS (Domain Name Server) - The IP address of your ISP's server, which translates the names of websites into IP addresses.

Domain - A specific name for a network of computers.

Download - To receive a file transmitted over a network.

DSL (Digital Subscriber Line) - An always-on broadband connection over traditional phone lines.

Dynamic IP Address - A temporary IP address assigned by a DHCP server.

EAP (Extensible Authentication Protocol) - A general authentication protocol used to control network access. Many specific authentication methods work within this framework.

Encryption - Encoding data transmitted in a network.

Ethernet - IEEE standard network protocol that specifies how data is placed on and retrieved from a common transmission medium.

Firewall - A set of related programs located at a network gateway server that protects the resources of a network from users from other networks.

Firmware - The programming code that runs a networking device.

FTP (File Transfer Protocol) - A protocol used to transfer files over a TCP/IP network.

Full Duplex - The ability of a networking device to receive and transmit data simultaneously.

Gateway - A device that interconnects networks with different, incompatible communications protocols.

Half Duplex - Data transmission that can occur in two directions over a single line, but only one direction at a time.

HTTP (HyperText Transport Protocol) - The communications protocol used to connect to servers on the World Wide Web.

Infrastructure - A wireless network that is bridged to a wired network via an access point.

IP (Internet Protocol) - A protocol used to send data over a network.

IP Address - The address used to identify a computer or device on a network.

IPCONFIG - A Windows 2000 and XP utility that displays the IP address for a particular networking device.

IPSec (Internet Protocol Security) - A VPN protocol used to implement secure exchange of packets at the IP layer.

ISP (Internet Service Provider) - A company that provides access to the Internet.

LAN - The computers and networking products that make up your local network.

MAC (Media Access Control) **Address** - The unique address that a manufacturer assigns to each networking device.

Mbps (MegaBits Per Second) - One million bits per second; a unit of measurement for data transmission.

NAT (Network Address Translation) - NAT technology translates IP addresses of a local area network to a different IP address for the Internet.

Network - A series of computers or devices connected for the purpose of data sharing, storage, and/or transmission between users.

Packet - A unit of data sent over a network.

Passphrase - Used much like a password, a passphrase simplifies the WEP encryption process by automatically generating the WEP encryption keys for Linksys products.

Ping (Packet INternet Groper) - An Internet utility used to determine whether a particular IP address is online.

POP3 (Post Office Protocol 3) - A standard mail server commonly used on the Internet.

Port - The connection point on a computer or networking device used for plugging in cables or adapters.

PoE (Power over Ethernet) - A technology enabling an Ethernet network cable to deliver both data and power.

PPPoE (Point to Point Protocol over Ethernet) - A type of broadband connection that provides authentication (username and password) in addition to data transport.

PPTP (Point-to-Point Tunneling Protocol) - A VPN protocol that allows the Point to Point Protocol (PPP) to be tunneled through an IP network. This protocol is also used as a type of broadband connection in Europe.

RADIUS (Remote Authentication Dial-In User Service) - A protocol that uses an authentication server to control network access.

RJ-45 (Registered Jack-45) - An Ethernet connector that holds up to eight wires.

Roaming - The ability to take a wireless device from one access point's range to another without losing the connection.

Router - A networking device that connects multiple networks together.

Server - Any computer whose function in a network is to provide user access to files, printing, communications, and other services.

SMTP (Simple Mail Transfer Protocol) - The standard e-mail protocol on the Internet.

SNMP (Simple Network Management Protocol) - A widely used network monitoring and control protocol.

SPI (Stateful Packet Inspection) **Firewall** - A technology that inspects incoming packets of information before allowing them to enter the network.

SSID (Service Set IDentifier) - Your wireless network's name.

Static IP Address - A fixed address assigned to a computer or device that is connected to a network.

Static Routing - Forwarding data in a network via a fixed path.

Subnet Mask - An address code that determines the size of the network.

Switch - 1. A data switch that connects computing devices to host computers, allowing a large number of devices to share a limited number of ports. 2. A device for making, breaking, or changing the connections in an electrical circuit.

TCP (Transmission Control Protocol) - A network protocol for transmitting data that requires acknowledgement from the recipient of data sent.

TCP/IP (Transmission Control Protocol/Internet Protocol) - A set of instructions PCs use to communicate over a network.

Telnet - A user command and TCP/IP protocol used for accessing remote PCs.

TFTP (Trivial File Transfer Protocol) - A version of the TCP/IP FTP protocol that has no directory or password capability.

Throughput - The amount of data moved successfully from one node to another in a given time period.

TKIP (Temporal Key Integrity Protocol) - a wireless encryption protocol that provides dynamic encryption keys for each packet transmitted.

Topology - The physical layout of a network.

TX Rate - Transmission Rate.

Upgrade - To replace existing software or firmware with a newer version.

Upload - To transmit a file over a network.

UPnP - Universal Plug and Play is a series of protocols to allow devices to connect seamlessly and to simplify the implementation of networks in the home and corporate environments.

URL (Uniform Resource Locator) - The address of a file located on the Internet.

VPN (Virtual Private Network) - A security measure to protect data as it leaves one network and goes to another over the Internet.

WAN (Wide Area Network)- The Internet.

WEP (Wired Equivalent Privacy) - A method of encrypting network data transmitted on a wireless network for greater security.

WLAN (Wireless Local Area Network) - A group of computers and associated devices that communicate with each other wirelessly.

WPA (Wi-Fi Protected Access) - a wireless security protocol using TKIP (Temporal Key Integrity Protocol) encryption, which can be used in conjunction with a RADIUS server.

Specifications

WVC200

Standards	IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 802.11e (Wireless QoS)
Ports	Ethernet, Antenna, Microphone, Power
Protocols	TCP/IP, HTTP, DHCP, SMTP, FTP, NTP, DNS, UPnP and DDNS
Button	One Reset Button
Cabling	UTP CAT 5
LEDs	Power, Activity, Ethernet, Wireless
Sensor	1/5" CMOS
Focal Length	500mm~Infinity
Frame Rate	Up to 30 fps
Resolution	640x480, 320x240, 160x120
Illumination	2LUX@F2.0
Field of View	60 degrees
Auto Patrol	9 Definable Preset Points by User
Pan	± 67 degrees
Tilt	-34 degrees (down) to +30 degrees (up)
Web UI	Built in Web UI for Easy Browser-Based Configuration (HTTP)
Web Browser	Internet Explorer 5.x, or Above
Event Logging	Event Logging Yes
Upgrade	Firmware Upgradable Through Web-Browser
Dual Codec	MPEG-4 Simple Profile, MJPEG
Snapshot	JPEG
Image Position	Flip and Mirror
Image Settings	Brightness and Contrast
Night Vision	Dual band filter for low light
Motion Detection	Send Video Clip to an email address on motion detection

Compression	G.726
Sampling Rate	8 KHz
Dual Bit Rate	16Kbps
Brightness	Auto/Manual Adjustment
Monitor and Recording Software	Included software for multiple camera monitoring and recording to your hard drive with advanced search by time and date.
WEP/WPA	WEP 64bit/128bit, WPA-TKIP, WPA-PSK
User List	User Rights List to View Video and/or to Camera Control Functions
Username/ Password	Logon authentication 20 characters username and 8 characters password
NTP	Network Time Protocol Support
SMTP	Simple Mail Transfer Protocol Client allows video clips to be emailed
FTP Client	FTP Client facilitates scheduling transfer of images to an FTP server
DDNS	Dynamic DNS facilitates reaching the camera by a name irrespective of what the IP address is. FreeDNS, DynDNs, 3322, and TZO is supported.
UPnP	Allows autodiscovery of the camera by other UPnP devices
Dimensions	1.26" x 7.83" x 6.89" (W x H x D)(32 mm x 199 mm x 175 mm
Unit Weight	1.01 lbs. (0.46 kg)
Power	5VDC, 2.5A Switching Power Supply
Certifications	FCC, CE and UL
Operating Temp	0 ºC to 40 ºC (-32 ºF to 104 ºF)
Storage Temp	-20 ºC to 70 ºC (-4 ºF to 140 ºF)
Operating Humidity	10% to 80%, Non-Condensing
Storage Humidity	0% to 90%, Non-Condensing

WVC210

Standards	IEEE802.11g, IEEE802.11b, IEEE802.3, IEEE802.3u, IEEE802.1p (QoS Priority), IEEE802.1q (VLAN), 802.11e (Wireless QoS)
Ports	Ethernet, Antenna, Microphone in, Speaker Out, Power
Protocols	TCP/IP, HTTP, DHCP, SMTP, FTP, NTP, DNS, UPnP, RTP, RTSP, and DDNS
Button	One Reset Button
Cabling	UTP CAT 5
LEDs	Power, Activity, Ethernet, Wireless
Sensor	1/4" CMOS
Focal Length	500mm~Infinity
Frame Rate	Up to 30 fps
Resolution	640x480, 320x240, 160x120
Illumination	1LUX@F2.0
Field of View	60 degrees
Auto Patrol	9 Definable Preset Points by User
Pan	± 67 degrees
Tilt	-34 degrees (down) to +30 degrees (up)
Web UI	Built in Web UI for Easy Browser-Based Configuration (HTTP)
Web Browser	Internet Explorer 5.x or above with ActiveX support for viewing, recording, playback and setting motion detection; limited support for Safari and Mozilla Firefox (no motion detection)
Logging	Event Logging (SYSLOG)
Upgrades	Firmware Upgradable Through Web-Browser
Dual Streaming Codecs	MPEG-4 Simple Profile, MJPEG
Snapshot	JPEG
Image Position	Flip and Mirror
Image Settings	Brightness and Contrast
Motion Detection	4 detection areas with individual sensitivity thresholds; triggers alerts
Compression	G.711 A-law and ì-law

Sampling Rate	8 KHz
Dual Bit Rate	16Kbps
Image Settings	Brightness and Contrast
Monitor and Recording Software	Monitoring and recording for up to 16 cameras Monitor live video, record, and play back simultaneously
WEP/WPA	WEP 64bit/128bit, WPA-TKIP, WPA-PSK, WPA2-PSK
User List	Three-level user rights list to view video and to control camera
Username/ Password	Logon authentication 20 characters username and 8 characters password
Physical security option	Kensington lock
NTP	Network Time Protocol synchronizes camera date and time with your network
SMTP	Simple Mail Transfer Protocol Client allows video clips to be emailed
FTP Client	FTP Client facilitates scheduling transfer of images to an FTP server
DDNS	Dynamic DNS facilitates accessing the camera by name, irrespective of the camera IP address
UPnP	Allows auto-discovery of the camera by other UPnP devices
Dimensions	1.26" x 7.83" x 6.89" (32 x 199 x 175 mm)
Unit Weight	1.01 lb. (.46 kg)
Power	5DVC 2.0A Switching Power Supply
Certifications	Wi-Fi, FCC, CE and UL
Operating Temp	-32 to 113°F (0 to 45°C)
Storage Temp	-4 to 140°F (-20 to 70°C)
Operating Humidity	10 to 80%, Non-condensing
Storage Humidity	0 to 90%, Non-condensing

Regulatory Information

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

We declare that the product is limited in CH1~CH11 by specified firmware controlled in the USA.

Safety Notices

Do not use this product near water, for example, in a wet basement or near a swimming pool.

Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

Industry Canada (Canada)

Operation is subject to the following two conditions:

1. This device may not cause interference and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This device has been designed to operate with an antenna having a maximum gain of 3.3 dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

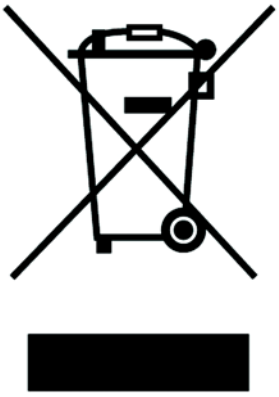
This device complies with Canadian ICES-003 and RSS210 rules.

Cet appareil est conforme aux normes NMB-003 et RSS210 d'Industry Canada.

User Information for Consumer Products Covered by EU Directive 2002/96/EC on Waste Electric and Electronic Equipment (WEEE)

WARNING: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

This document contains important information for users with regards to the proper disposal and recycling of Linksys products. Consumers are required to comply with this notice for all electronic products bearing the following symbol:



English

Environmental Information for Customers in the European Union

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

Ceština/Czech

Informace o ochraně životního prostředí pro zákazníky v zemích Evropské unie

Evropská směrnice 2002/96/ES zakazuje, aby zařízení označené tímto symbolem na produktu anebo na obalu bylo likvidováno s netříděným komunálním odpadem. Tento symbol udává, že daný produkt musí být likvidován odděleně od běžného komunálního odpadu. Odpovídáte za likvidaci tohoto produktu a dalších elektrických a elektronických zařízení prostřednictvím určených sběrných míst stanovených vládou nebo místními úřady. Správná likvidace a recyklace pomáhá předcházet potenciálním negativním dopadům na životní prostředí a lidské zdraví. Podrobnější informace o likvidaci starého vybavení si laskavě vyžádejte od místních úřadů, podniku zabývajícího se likvidací komunálních odpadů nebo obchodu, kde jste produkt zakoupili.

Dansk/Danish

Miljøinformation for kunder i EU

EU-direktiv 2002/96/EF kræver, at udstyr der bærer dette symbol på produktet og/eller emballagen ikke må bortskaffes som usorteret kommunalt affald. Symbolet betyder, at dette produkt skal bortskaffes adskilt fra det almindelige husholdningsaffald. Det er dit ansvar at bortskaffe dette og andet elektrisk og elektronisk udstyr via bestemte indsamlingssteder udpeget af staten eller de lokale myndigheder. Korrekt bortskaffelse og genvinding vil hjælpe med til at undgå mulige skader for miljøet og menneskers sundhed. Kontakt venligst de lokale myndigheder, renovationstjenesten eller den butik, hvor du har købt produktet, angående mere detaljeret information om bortskaffelse af dit gamle udstyr.

Nederlands/Dutch

Milieu-informatie voor klanten in de Europese Unie

De Europese Richtlijn 2002/96/EC schrijft voor dat apparatuur die is voorzien van dit symbool op het product of de verpakking, niet mag worden ingezameld met niet-gescheiden huishoudelijk afval. Dit symbool geeft aan dat het product apart moet worden ingezameld. U bent zelf verantwoordelijk voor de vernietiging van deze en andere elektrische en elektronische apparatuur via de daarvoor door de landelijke of plaatselijke overheid aangewezen inzamelingskanalen. De juiste vernietiging en recycling van deze apparatuur voorkomt mogelijke negatieve gevolgen voor het milieu en de gezondheid. Voor meer informatie over het vernietigen van uw oude apparatuur neemt u contact op met de plaatselijke autoriteiten of afvalverwerkingsdienst, of met de winkel waar u het product hebt aangeschaft.

Eesti/Estonian

Keskkonnaalane informatsioon Euroopa Liidus asuvatele klientidele

Euroopa Liidu direktiivi 2002/96/EÜ nõuete kohaselt on seadmeid, millel on tootel või pakendil käesolev sümbol, keelatud kõrvaldada koos sorteerimata olmejäätmetega. See sümbol näitab, et toode tuleks kõrvaldada eraldi tavalistest olmejäätmevoogudest. Olete kohustatud kõrvaldama käesoleva ja ka muud elektri- ja elektroonikaseadmed riigi või kohalike ametiasutuste poolt ette nähtud kogumispunktide kaudu. Seadmete korrektne kõrvaldamine ja ringlussevõtt aitab vältida võimalikke negatiivseid tagajärgi keskkonnale ning inimeste tervisele. Vanade seadmete kõrvaldamise kohta täpsema informatsiooni saamiseks võtke palun ühendust kohalike ametiasutustega, jäätmekäitlusfirmaga või kauplusega, kust te toote ostsite.

Suomi/Finnish

Ympäristöä koskevia tietoja EU-alueen asiakkaille

EU-direktiivi 2002/96/EY edellyttää, että jos laitteistossa on tämä symboli itse tuotteessa ja/tai sen pakkauksessa, laitteistoa ei saa hävittää lajittelemattoman yhdyskuntajätteen mukana. Symboli merkitsee sitä, että tämä tuote on hävitettävä erillään tavallisesta kotitalousjätteestä. Sinun vastuullasi on hävittää tämä elektroniikkatuote ja muut vastaavat elektroniikkatuotteet viemällä tuote tai tuotteet viranomaisten määräämään keräyspisteeseen. Laitteiston oikea hävittäminen estää mahdolliset kielteiset vaikutukset ympäristöön ja ihmisten terveyteen. Lisätietoja vanhan laitteiston oikeasta hävitystavasta saa paikallisilta viranomaisilta, jätteenhävityspalvelusta tai siitä myymälästä, josta ostit tuotteen.

Français/French

Informations environnementales pour les clients de l'Union européenne

La directive européenne 2002/96/CE exige que l'équipement sur lequel est apposé ce symbole sur le produit et/ou son emballage ne soit pas jeté avec les autres ordures ménagères. Ce symbole indique que le produit doit être éliminé dans un circuit distinct de celui pour les déchets des ménages. Il est de votre responsabilité de jeter ce matériel ainsi que tout autre matériel électrique ou électronique par les moyens de collecte indiqués par le gouvernement et les pouvoirs publics des collectivités territoriales. L'élimination et le recyclage en bonne et due forme ont pour but de lutter contre l'impact néfaste potentiel de ce type de produits sur l'environnement et la santé publique. Pour plus d'informations sur le mode d'élimination de votre ancien équipement, veuillez prendre contact avec les pouvoirs publics locaux, le service de traitement des déchets, ou l'endroit où vous avez acheté le produit.

Deutsch/German

Umweltinformation für Kunden innerhalb der Europäischen Union

Die Europäische Richtlinie 2002/96/EC verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.

Ξλληνικά/Greek

Στοιχεία περιβαλλοντικής προστασίας για πελάτες εντός της Ευρωπαϊκής Ένωσης

Η Κοινοτική Οδηγία 2002/96/EC απαιτεί ότι ο εξοπλισμός ο οποίος φέρει αυτό το σύμβολο στο προϊόν και/ή στη συσκευασία του δεν πρέπει να απορρίπτεται μαζί με τα μικτά κοινοτικά απορρίμματα. Το σύμβολο υποδεικνύει ότι αυτό το προϊόν θα πρέπει να απορρίπτεται ξεχωριστά από τα συνήθη οικιακά απορρίμματα. Είστε υπεύθυνος για την απόρριψη του παρόντος και άλλου ηλεκτρικού και ηλεκτρονικού εξοπλισμού μέσω των καθορισμένων εγκαταστάσεων συγκέντρωσης απορριμμάτων οι οποίες παρέχονται από το κράτος ή τις αρμόδιες τοπικές αρχές. Η σωστή απόρριψη και ανακύκλωση συμβάλλει στην πρόληψη πιθανών αρνητικών συνεπειών για το περιβάλλον και την υγεία. Για περισσότερες πληροφορίες σχετικά με την απόρριψη του παλιού σας εξοπλισμού, παρακαλώ επικοινωνήστε με τις τοπικές αρχές, τις υπηρεσίες απόρριψης ή το κατάστημα από το οποίο αγοράσατε το προϊόν.

Magyar/Hungarian

Környezetvédelmi információ az európai uniós vásárlók számára

A 2002/96/EC számú európai uniós irányelv megkívánja, hogy azokat a termékeket, amelyeken, és/vagy amelyek csomagolásán az alábbi címke megjelenik, tilos a többi szelektálatlan lakossági hulladékkal együtt kidobni. A címke azt jelöli, hogy az adott termék kidobásakor a szokványos háztartási hulladékelszállítási rendszerektõl elkülönített eljárást kell alkalmazni. Az Ön felelõssége, hogy ezt, és más elektromos és elektronikus berendezéseit a kormányzati vagy a helyi hatóságok által kijelölt gyűjtõredszereken keresztül számolja fel. A megfelelõ hulladékfeldolgozás segít a környezetre és az emberi egészségre potenciálisan ártalmas negatív hatások megelõzésében. Ha elavult berendezéseinek felszámolásához további részletes információra van szüksége, kérjük, lépjen kapcsolatba a helyi hatóságokkal, a hulladékfeldolgozási szolgálattal, vagy azzal üzlettel, ahol a terméket vásárolta.

Italiano/Italian

Informazioni relative all'ambiente per i clienti residenti nell'Unione Europea

La direttiva europea 2002/96/EC richiede che le apparecchiature contrassegnate con questo simbolo sul prodotto e/o sull'imballaggio non siano smaltite insieme ai rifiuti urbani non differenziati. Il simbolo indica che questo prodotto non deve essere smaltito insieme ai normali rifiuti domestici. È responsabilità del proprietario smaltire sia questi prodotti sia le altre apparecchiature elettriche ed elettroniche mediante le specifiche strutture di raccolta indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento ed il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per la salute dell'essere umano. Per ricevere informazioni più dettagliate circa lo smaltimento delle vecchie apparecchiature in Vostro possesso, Vi invitiamo a contattare gli enti pubblici di competenza, il servizio di smaltimento rifiuti o il negozio nel quale avete acquistato il prodotto.

Latviešu valoda/Latvian

Ekoloģiska informācija klientiem Eiropas Savienības jurisdikcijā

Direktīvā 2002/96/EK ir prasība, ka aprīkojumu, kam pievienota zīme uz paša izstrādājuma vai uz tā iesaiņojuma, nedrīkst izmest nešķirotā veidā kopā ar komunālajiem atkritumiem (tiem, ko rada vietēji iedzīvotāji un uzņēmumi). Šī zīme nozīmē to, ka šī ierīce ir jāizmet atkritumos tā, lai tā nenonāktu kopā ar parastiem mājsaimniecības atkritumiem. Jūsu pienākums ir šo un citas elektriskas un elektroniskas ierīces izmest atkritumos, izmantojot īpašus atkritumu savākšanas veidus un līdzekļus, ko nodrošina valsts un pašvaldību iestādes. Ja izmešana atkritumos un pārstrāde tiek veikta pareizi, tad mazinās iespējamais kaitējums dabai un cilvēku veselībai. Sīkākas ziņas par novecojuša aprīkojuma izmešanu atkritumos jūs varat saņemt vietējā pašvaldībā, atkritumu savākšanas dienestā, kā arī veikalā, kur iegādājāties šo izstrādājumu.

Lietuvškai/Lithuanian

Aplinkosaugos informacija, skirta Europos Sąjungos vartotojams

Europos direktyva 2002/96/EC numato, kad įrangos, kuri ir (arba) kurios pakuotė yra pažymėta šiuo simboliu, negalima šalinti kartu su nerūšiuotomis komunalinėmis atliekomis. Šis simbolis rodo, kad gaminį reikia šalinti atskirai nuo bendro buitinių atliekų srauto. Jūs privalote užtikrinti, kad ši ir kita elektros ar elektroninė įranga būtų šalinama per tam tikras nacionalinės ar vietinės valdžios nustatytas atliekų rinkimo sistemas. Tinkamai šalinant ir perdirbant atliekas, bus išvengta galimos žalos aplinkai ir žmonių sveikatai. Daugiau informacijos apie jūsų senos įrangos šalinimą gali pateikti vietinės valdžios institucijos, atliekų šalinimo tarnybos arba parduotuvės, kuriose įsigijote tą gaminį.

Malti/Maltese

Informazzjoni Ambjentali għal Klijenti fl-Unjoni Ewropea

Id-Direttiva Ewropea 2002/96/KE titlob li t-tagħmir li jkun fih is-simbolu fuq il-prodott u/jew fuq l-ippakkjar ma jistax jintrema ma' skart muniċipali li ma ġiex isseparat. Is-simbolu jindika li dan il-prodott għandu jintrema separatament minn ma' l-iskart domestiku regolari. Hija responsabbiltà tiegħek li tarmi dan it-tagħmir u kull tagħmir ieħor ta' l-elettriku u elettroniku permezz ta' faċilitajiet ta' ġbir appuntati apposta mill-gvern jew mill-awtoritajiet lokali. Ir-rimi b'mod korrett u r-riċiklaġġ jgħin jipprevjeni konsegwenzi negattivi potenzjali għall-ambjent u għas-saħħa tal-bniedem. Għal aktar informazzjoni dettaljata dwar ir-rimi tat-tagħmir antik tiegħek, jekk jogħġbok ikkuntattja lill-awtoritajiet lokali tiegħek, is-servizzi għar-rimi ta' l-iskart, jew il-ħanut minn fejn xtrajt il-prodott.

Norsk/Norwegian

Miljøinformasjon for kunder i EU

EU-direktiv 2002/96/EF krever at utstyr med følgende symbol avbildet på produktet og/eller pakningen, ikke må kastes sammen med usortert avfall. Symbolet indikerer at dette produktet skal håndteres atskilt fra ordinær avfallsinnsamling for husholdningsavfall. Det er ditt ansvar å kvitte deg med dette produktet og annet elektrisk og elektronisk avfall via egne innsamlingsordninger slik myndighetene eller kommunene bestemmer. Korrekt avfallshåndtering og gjenvinning vil være med på å forhindre mulige negative konsekvenser for miljø og helse. For nærmere informasjon om håndtering av det kasserte utstyret ditt, kan du ta kontakt med kommunen, en innsamlingsstasjon for avfall eller butikken der du kjøpte produktet.

Polski/Polish

Informacja dla klientów w Unii Europejskiej o przepisach dotyczących ochrony środowiska

Dyrektywa Europejska 2002/96/EC wymaga, aby sprzęt oznaczony symbolem znajdującym się na produkcie i/lub jego opakowaniu nie był wyrzucany razem z innymi niesortowanymi odpadami komunalnymi. Symbol ten wskazuje, że produkt nie powinien być usuwany razem ze zwykłymi odpadami z gospodarstw domowych. Na Państwu spoczywa obowiązek wyrzucania tego i innych urządzeń elektrycznych oraz elektronicznych w punktach odbioru wyznaczonych przez władze krajowe lub lokalne. Pozbywanie się sprzętu we właściwy sposób i jego recykling pomogą zapobiec potencjalnie negatywnym konsekwencjom dla środowiska i zdrowia ludzkiego. W celu uzyskania szczegółowych informacji o usuwaniu starego sprzętu, prosimy zwrócić się do lokalnych władz, służb oczyszczania miasta lub sklepu, w którym produkt został nabyty.

Português/Portuguese

Informação ambiental para clientes da União Europeia

A Directiva Europeia 2002/96/CE exige que o equipamento que exibe este símbolo no produto e/ou na sua embalagem não seja eliminado junto com os resíduos municipais não separados. O símbolo indica que este produto deve ser eliminado separadamente dos resíduos domésticos regulares. É da sua responsabilidade eliminar este e qualquer outro equipamento eléctrico e electrónico através dos instalações de recolha designadas pelas autoridades governamentais ou locais. A eliminação e reciclagem correctas ajudarão a prevenir as consequências negativas para o ambiente e para a saúde humana. Para obter informações mais detalhadas sobre a forma de eliminar o seu equipamento antigo, contacte as autoridades locais, os serviços de eliminação de resíduos ou o estabelecimento comercial onde adquiriu o produto.

Slovenčina/Slovak

Informácie o ochrane životného prostredia pre zákazníkov v Európskej únii

Podľa európskej smernice 2002/96/ES zariadenie s týmto symbolom na produkte a/alebo jeho balení nesmie byť likvidované spolu s netriedeným komunálnym odpadom. Symbol znamená, že produkt by sa mal likvidovať oddelene od bežného odpadu z domácností. Je vašou povinnosťou likvidovať toto i ostatné elektrické a elektronické zariadenia prostredníctvom špecializovaných zberných zariadení určených vládou alebo miestnymi orgánmi. Správna likvidácia a recyklácia pomôže zabrániť prípadným negatívnym dopadom na životné prostredie a zdravie ľudí. Ak máte záujem o podrobnejšie informácie o likvidácii starého zariadenia, obráťte sa, prosím, na miestne orgány, organizácie zaoberajúce sa likvidáciou odpadov alebo obchod, v ktorom ste si produkt zakúpili.

Slovenčina/Slovene

Okoljske informacije za stranke v Evropski uniji

Evropska direktiva 2002/96/EC prepoveduje odlaganje opreme, označene s tem simbolom – na izdelku in/ali na embalaži – med običajne, nerazvrščene odpadke. Ta simbol opozarja, da je treba izdelek odvreči ločeno od preostalih gospodinjskih odpadkov. Vaša odgovornost je, da to in preostalo električno in elektronsko opremo odnesete na posebna zbirališča, ki jih določijo državne ustanove ali lokalna uprava. S pravilnim odlaganjem in recikliranjem boste preprečili morebitne škodljive vplive na okolje in zdravje ljudi. Če želite izvedeti več o odlaganju stare opreme, se obrnite na lokalno upravo, odpad ali trgovino, kjer ste izdelek kupili.

Español/Spanish

Información medioambiental para clientes de la Unión Europea

La Directiva 2002/96/CE de la UE exige que los equipos que lleven este símbolo en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.

Svenska/Swedish

Miljöinformation för kunder i Europeiska unionen

Det europeiska direktivet 2002/96/EC kräver att utrustning med denna symbol på produkten och/eller förpackningen inte får kastas med osorterat kommunalt avfall Symbolen visar att denna produkt bör kastas efter att den avskiljts från vanligt hushållsavfall. Det faller på ditt ansvar att kasta denna och annan elektrisk och elektronisk utrustning på fastställda insamlingsplatser utsedda av regeringen eller lokala myndigheter. Korrekt kassering och återvinning skyddar mot eventuella negativa konsekvenser för miljön och personhälsa. För mer detaljerad information om kassering av din gamla utrustning kontaktar du dina lokala myndigheter, avfallshanteringen eller butiken där du köpte produkten.

For more information, visit www.linksys.com.

Contact Information

Need to contact Linksys?

For additional information or troubleshooting help, refer to the User Guide on the CD-ROM. Additional support is also available by phone or online.

US/Canada Contacts

- 24-Hour Technical Support: 866-606-1866
- RMA (Return Merchandise Authorization): http://www.linksys.com/warranty
- Website: http://www.linksys.com
- FTP Site: ftp://ftp.linksys.com
- Support: http://www.linksys.com/support
- Sales Information: 800-546-5797 (800-LINKSYS)

EU Contacts

- Website: http://www.linksys.com/international
- Product Registration: http://www.linksys.com/registration

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